Indiana Department of Environmental Management OFFICE OF AIR QUALITY

AND

THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

Asphalt Materials, Inc. 4902 West 86th Street Indianapolis, Indiana 46268

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

| Operation Permit No.: F097-6035-00098 | |
|--|-------------------------------|
| Issued by: | Issuance Date: July 8, 2003 |
| Originally Signed by John B. Chavez John B. Chavez, Administrator Office of Environmental Services | Expiration Date: July 8, 2008 |

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary asphalt emulsion blending and asphalt oxidation plant.

Authorized Individual: Vice President of Operations

Source Address: 4902 West 86th Street, Indianapolis, Indiana 46268 Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268

General Source Phone: 317-872-4240
SIC Code: 2951/2952
Source Location Status: Marion

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source under PSD Rules:

Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) Asphalt Blowing Still (identified as ST-047), constructed in 1996, having a maximum capacity of 12 tons per hour, with emissions exhausted to a 5,000-gallon, condensate vapor knock-out tank (identified as ST-046 and constructed in 1996). The knock-out tank exhausts to a 7.5 MMBtu per hour, natural gas-fired afterburner (identified as CE-01), used to control emissions of VOC, exhausting at stack CE-02.
- (b) One (1) natural gas-fired boiler, identified as SB-01, with a maximum heat input capacity of 6.7 MMBtu per hour and exhausting at stack SB-01. This boiler was constructed in 1959 and uses fuel oil No.2 as an alternative fuel.
- (c) One (1) natural gas-fired boiler, identified as SB-02, with a maximum heat input capacity of 24.25 MMBtu per hour and exhausting at stack SB-02. This boiler was constructed in March 1994 and uses fuel oil No.2 as an alternative fuel.
- (d) One (1) natural gas-fired asphalt heater, identified as PH-01, with a maximum heat input capacity of 11.6 MMBtu per hour and exhausting at stack PH-01. This heater was constructed in 1960 and uses fuel oil No.2 as an alternative fuel.
- (e) Six (6) oil heaters, consisting of:
 - (1) One (1) 3.5 MMBtu per hour oil heater, identified as HO-01, exhausting through stack HO-01 and fired using natural or fuel oil No.2. This heater was constructed in 1967.
 - (2) Two (2) 3.54 MMBtu per hour oil heater, identified as HO-03 and HO-04, exhausting through stacks HO-03 and HO-04, and fired using natural or fuel oil No.2. Heater HO-03 and heater HO-04 were constructed in 1982.

- (3) One (1) 10.0 MMBtu per hour oil heater, identified as HO-05, exhausting through stack HO-05 and fired using natural or fuel oil No.2. This heater was constructed in 1994.
- (4) Two (2) 4.2 MMBtu per hour oil heater, identified as HO-06 and HO-07, exhausting through stack HO-06 and HO-07 and fired using natural or fuel oil No.2. Heater HO-06 was constructed in 1975 and heater HO-07 was constructed in 1980.
- (f) Two (2) 2.5 MMBtu per hour tank tube heaters, identified as TH-37 and TH-42, exhausting through stacks TH-37 and TH-42, and fired using natural or fuel oil No.2. These units were constructed in 1987.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight, including:
 - (1) One (1) 2.0 MMBtu per hour oil heater, identified as HO-02, exhausting through stack HO-02 and fired using natural or fuel oil No.2. This heater was constructed in 1959.
 - (2) One (1) 0.5 MMBtu per hour tank tube heater, identified as TH-34, exhausting through stack TH-34 and fired using natural or fuel oil No.2. This heater was constructed in 1995.
 - One (1) 1.12 MMBtu per hour tank tube heater, identified as TH-43, exhausting through stack TH-43 and fired using natural or fuel oil No.2. This heater was constructed in 1980.
- (b) Fifty-Eight (58) storage tanks with volatile organic compound emissions equal to or less than 3 pounds per hour and 15 pounds per day, and HAP emissions equal to or less than 5 pounds per day and 1 ton per year of a single HAP and 12.5 pounds per day and 2.5 ton per year of any combination of HAPs, including:
 - (1) Four (4) storage tanks (identified as ST-001, ST-002, ST-003, and ST-004), used to store petroleum asphalt, each having a maximum storage capacity of 210,990 gallons. These storage tanks were constructed in 1959.
 - (2) One (1) storage tank (identified as ST-005), used to store tall oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2001.
 - (3) One (1) storage tank (identified as ST-006), used to store tall oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2001.
 - (4) One (1) storage tank (identified as ST-007), used to store petroleum asphalt, having a maximum storage capacity of 215,913 gallons. This storage tank was constructed in 1980.
 - (5) One (1) storage tank (identified as ST-008), used to store tall oil, having a maximum storage capacity of 8,300 gallons. This storage tank was constructed in 1990.

- (6) One (1) storage tank (identified as ST-009), used to store asphalt product, having a maximum storage capacity of 64,173 gallons. This storage tank was constructed in 1959.
- (7) One (1) storage tank (identified as ST-010), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was constructed in 1998.
- (8) One (1) storage tank (identified as ST-011), used to store asphalt emulsion, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1998.
- (9) One (1) storage tank (identified as ST-012), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was constructed in 1999.
- (10) One (1) storage tank (identified as ST-013), used to store asphalt emulsion, each having a maximum storage capacity of 64,173 gallons. These storage tanks were constructed in 1959.
- (11) One (1) storage tank (identified as ST-014), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was installed in 1999.
- (12) Four (4) storage tanks (identified as ST-016, ST-017, ST-018, and ST-019), used to store asphalt emulsion, each having a maximum storage capacity of 21,151 gallons. These storage tanks were constructed in 1959.
- (13) One (1) storage tank (identified as ST-015), used to store asphalt emulsion, having a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- (14) One (1) storage tank (identified as ST-020), used to store tall oil, having a maximum storage capacity of 20,368 gallons. This storage tank was constructed in 1959.
- (15) One (1) storage tank (identified as ST-021), used to store aqueous solutions of water with 5% oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2000.
- (16) One (1) storage tank (identified as ST-022), used to store distillate fuel oil, having a maximum storage capacity of 20,080 gallons. This storage tank was constructed in 1988.
- (17) One (1) storage tank (identified as ST-023), used to store petroleum asphalt, with a maximum storage capacity of 20,728 gallons. This storage tank was constructed in 1959.
- (18) One (1) storage tank (identified as ST-024), used to store petroleum asphalt, with a maximum storage capacity of 22,995 gallons. This storage tank was constructed in 1959.
- (19) One (1) storage tank (identified as ST-025), used to store petroleum asphalt, having a maximum storage capacity of 424,484 gallons. This storage tank was constructed in 1968.

- (20) One (1) storage tank (identified as ST-028), used to store asphalt product, having a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-029), used to store asphalt product, with a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-030), used to store sodium hydroxide, having a maximum storage capacity of 15,222 gallons. This storage tank was constructed in 1959.
- (23) One (1) storage tank (identified as ST-031), used to store distillate fuel oil, having a maximum storage capacity of 15,222 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-032), used to store petroleum asphalt, having a maximum storage capacity of 64,173 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-033), used to store petroleum asphalt product, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-034), used to store petroleum asphalt product, having a maximum storage capacity of 59,720 gallons. This storage tank was constructed in 1998.
- (27) One (1) storage tank (identified as ST-035), used to store petroleum asphalt, having a maximum storage capacity of 210,990 gallons. This storage tank was constructed in 1959.
- (28) One (1) storage tank (identified as ST-036), used to store petroleum asphalt, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1999.
- (29) One (1) storage tank (identified as ST-037), used to store petroleum asphalt product, having a maximum storage capacity of 127,092 gallons. This storage tank was constructed in 1998.
- (30) One (1) storage tank (identified as ST-038), used to store petroleum asphalt, having a maximum storage capacity of 59,715 gallons. This storage tank was constructed in 1980.
- (31) Two (2) storage tanks (identified as ST-039 and ST-40), used to store cutback asphalt, each having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1985.
- One (1) storage tank (identified as ST-041), used to store petroleum asphalt, having a maximum storage capacity of 1,054,951 gallons. This storage tank was constructed in 1973.
- (33) One (1) storage tank (identified as ST-042), used to store asphalt, having a maximum storage capacity of 20,728 gallons. This storage tank was constructed in 1975.

- One (1) storage tank (identified as ST-043), used to store asphalt, having a maximum storage capacity of 23,689 gallons. This storage tank was constructed in 1980.
- One (1) storage tank (identified as ST-044), used to store fuel oil No.6, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1980.
- (36) One (1) storage tank (identified as ST-045), used to store petroleum asphalt, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1980.
- One (1) storage tank (identified as ST-049), used to store anti-strip additive, having a maximum storage capacity of 7,774 gallons. This storage tank was constructed in 1987.
- (38) One (1) storage and processing tank (identified as ST-050), used to store multigrade asphalt, having a maximum storage capacity of 25,000 gallons. This storage tank was constructed in 1988.
- (39) One (1) storage and processing tank (identified as ST-051), used to store multigrade asphalt, having a maximum storage capacity of 25,000 gallons. This storage tank was constructed in 1987.
- (40) One (1) storage and processing overflow tank (identified as ST-052), used to store multigrade asphalt, having a maximum storage capacity of 5,264 gallons. This storage tank was constructed in 1987.
- (41) One (1) storage tank (identified as ST-053), used to store polyphosphoric acid, having a maximum storage capacity of 4,500 gallons. This storage tank will be constructed in 2002/2003.
- (42) Two (2) storage tanks (identified as ST-054 and ST-055), used to store asphalt, each having a maximum storage capacity of 30,104 gallons. These storage tanks will be constructed in 2003/2004.
- (43) Two (2) storage tanks (identified as ST-056 and ST-057), used to store asphalt, having a maximum storage capacity of 2,165,520 gallons and 4,265,856 gallons, respectively. These storage tanks will be constructed in 2002/2003.
- (44) Two (2) storage tanks (identified as ST-066 and ST-067), used to store petroleum asphalt, each having a maximum storage capacity of 210,000 gallons. These storage tanks were constructed in 1970.
- (45) One (1) storage tank (identified as ST-175), used to store petroleum asphalt, having a maximum storage capacity of 7,401,059 gallons. This storage tank was constructed in 1993.
- (46) One (1) storage tank (identified as ST-803), used to store petroleum asphalt, having a maximum storage capacity of 3,352,388 gallons. This storage tank was constructed in 1970.
- (47) One (1) storage tank (identified as ST-560), used to store petroleum asphalt, having a maximum storage capacity of 2,350,080 gallons. This storage tank was constructed in 1970.

- (48) One (1) storage tank (identified as ST-260), used to store petroleum asphalt, having a maximum storage capacity of 1,054,951 gallons. This storage tank was constructed in 1970.
- (c) Processing units with volatile organic compound emissions equal to or less than 3 pounds per hour and 15 pounds per day, and HAP emissions equal to or less than 5 pounds per day and 1 ton per year of a single HAP and 12.5 pounds per day and 2.5 ton per year of any combination of HAPs, including the following sixty (60) storage tanks, including the following units:
 - (1) One (1) enclosed Asphalt Emulsion Colloid Shear Mill, constructed in 1960, having a maximum production capacity of 40.0 tons per hour.
 - (2) One (1) enclosed Multigrade Asphalt Colloid Shear Mill, constructed in 1980, having a maximum production capacity of 16.9 tons per hour.
 - Two (2) blending tanks (identified as ST-026 and ST-027), constructed in 1972, each having a maximum storage capacity of 33,000 gallons.
 - (4) One (1) batch processing tank (identified as ST-048), constructed in 1987, having a maximum capacity of 1,170 gallons, and used to mix hot petroleum asphalt with additives before milling.
- (d) Paved and unpaved roads and parking lots with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and OES for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-7-7]

- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) The Indianapolis Air Pollution Control Board (IAPCB) has adopted by reference state rules listed in Attachment A of this permit. The version adopted by reference includes all amendments, additions and repeals filed with the Secretary of State through August 10, 1997 and published in the Indiana Register September 1, 1997, unless otherwise indicated in the adoption by reference. For the purposes of this permit, all state rules adopted by reference by the IAPCB are enforceable by OES using local enforcement procedures. Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, and OES, within a reasonable time, any information that IDEM, OAQ, and OES, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, and OES, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

> (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, and OES, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue

Indianapolis, Indiana 46221

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, and OES, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within thirty (30) after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and OES, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

IDEM, OAQ:

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

OES:

Telephone No.: 317-327-2237 (ask for Data Compliance)

Facsimile No.: 317-327-2274

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46221

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and OES, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and OES, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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> (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46221

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independently of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or OES determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, or OES, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, or OES, at least

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thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or OES, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and OES, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES on or before the date it is due.
 - (2) If IDEM, OAQ, and OES upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
 If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, and OES takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and OES any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

> Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46221

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.19 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and OES, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, and OES, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis
Office of Environmental Services
2700 South Belmont Avenue
Indianapolis, Indiana 46221

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

B.24 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

- (a) The requirements to obtain a permit revision under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Section A.3.
- (b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction work is suspended for a continuous period of one (1) year or more.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
 - (a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
 - (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on June 3, 1996. The plan is included as Attachment A.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

 The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.
 - (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
 - (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
 - (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
 - (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation

The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
thoroughly inspect the affected portion of the facility for the presence of asbestos. The
requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, and OES, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within thirty (30) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within thirty (30) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

in writing, prior to the end of the initial thirty (30) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

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- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

within ninety (90) days from the date of issuance of this permit.

C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

- C.17 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
 - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ and OES, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its

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Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

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(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.19 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present

or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

City of Indianapolis Office of Environmental Services 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and OES, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

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- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) One (1) Asphalt Blowing Still (identified as ST-047), constructed in 1996, having a maximum capacity of 12 tons per hour, with emissions exhausted to a 5,000-gallon, vapor condensate knock-out tank (identified as ST-046 and constructed in 1996). The knock-out tank exhausts to a 7.5 MMBtu per hour, natural gas-fired afterburner (identified as CE-01), used to control emissions of VOC, exhausting at stack CE-02.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 FESOP Limitations [326 IAC 2-8][326 IAC 2-2]

Pursuant to 326 IAC 2-8, the PM_{10} and VOC emissions asphalt blowing still (ST-047) shall be limited as follows:

- (a) The PM_{10} emissions from the asphalt blowing still shall not exceed 0.068 pounds of PM_{10} per hour. This limit is equivalent to 0.3 tons per twelve (12) consecutive month period.
- (b) The VOC emissions from the asphalt blowing still shall not exceed 0.74 pounds of VOC per ton of asphalt processed. This limit is equivalent to 0.39 tons per twelve (12) consecutive month period at the maximum capacity of the blowing still of 12 tons per hour.

These conditions, combined with the potential to emit from the boilers, heaters and storage tanks result in PM_{10} and VOC emissions from the entire source that are less than or equal to 4.9 tons per twelve (12) consecutive month period and 40.7 tons per twelve (12) consecutive month period, respectively. Compliance with conditions (a) and (b) make 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (PSD) not applicable.

D.1.2 PM Limitation [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the PM emissions from the asphalt blowing still (ST-047) shall at all times be controlled by the knock-out tank and afterburner. The PM emissions shall not exceed 0.068 pounds of PM per hour. This limit is equivalent to 0.3 tons of PM per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.3 Particulate Matter (PM) [326 IAC 6-1-12]

Pursuant to 326 IAC 6-1-12 (Marion), the particulate matter emissions from the asphalt blowing still (ST-047) shall be limited to 0.004 grains per dry standard cubic foot (0.3 tons per year).

D.1.4 General Provision Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart UU.

D.1.5 NSPS Requirements [326 IAC 12-1] [40 CFR 60, Subpart UU]

- (a) Pursuant to 40 CFR 60.472(b), particulate matter emissions from the asphalt blowing still (ST-047) shall not exceed the following limits:
 - (1) 1.3 pounds per ton of asphalt charged when a catalyst is added to the still.
 - (2) 1.2 pounds per ton of asphalt charged during blowing without a catalyst.

(b) Pursuant to 40 CFR 60.472(b)(5), the opacity of the exhaust gases from the blowing still shall not exceed zero percent.

D.1.6 BACT for Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), the VOC emissions from the asphalt blowing still shall be controlled by the knock-out tank (CD-02) and afterburner (CE-01). The knock-out tank and afterburner shall be in operation and control emissions from the blowing still at all times the blowing still is in operation.

D.1.7 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control devices.

Compliance Determination Requirements

D.1.8 Testing Requirements [40 CFR 60, Subpart UU][326 IAC 12]

Pursuant to 40 CFR 60.474(b) and 40 CFR 60.8, the Permittee shall conduct a performance test of the afterburner used to control emissions from the asphalt blowing still (unit ST-047) within one hundred and eighty (180) days after issuance of this permit, using test methods in 40 CFR 60, Appendix A or other methods or other methods approved by the Administrator. The Permittee shall determine compliance with the particulate matter standards as follows:

(a) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (CQ) / (P \times 7000 \text{ gr/lb})$$

Where:

E = Emission rate of particulate matter (lbs/ton)
C = Concentration of particulate matter (gr/dscf)
Q = Volumetric flow rate of effluent gas (dscf/hr)
P = Asphalt charging rate (ton/hr)

- (b) Method 5A shall be used to determine the particulate matter concentration (C) and volumetric flow rate (Q) of the effluent gas. The sampling time and sample volume for each run shall be at least 90 minutes or the duration of the coating blow or noncoating blow, whichever is greater, and 79.4 dscf.
- (c) The asphalt charging rate (P) shall be computed for each run using the following equation:

$$P = (VD) / (T \times 2000 \text{ lb/ton})$$

Where:

P = Asphalt charging rate (ton/hr)
V = Volume of asphalt charged (ft³)
D = Density of asphalt (lb/ft³)
T = Duration of test run (hrs)

The volume of asphalt charged (V) shall be measured by any means accurate to within ten (10) percent. The density (D) of the asphalt shall be computed using the following equation:

$$D = K_1 - (K_2 T_i)$$

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Where:

D = Density of the asphalt (lb/ft^3)

 $K_1 = 64.70 \text{ lb/ft}^3$ $K_2 = 0.0694 \text{ lb/(ft}^3 \text{ °F)}$

T_i = Temperature at the start of the blow (°F)

- (d) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (e) The Permittee shall use a monitoring device to monitor and record continuously the temperature during the testing and shall report the results to the Administrator with the performance test results.
- (f) If at a later date, the Permittee believes the emissions limits are being met even though the operating temperature of the afterburner is lower than that established during the performance test, then the Permittee may submit a written request to the Administrator to repeat the performance test.

D.1.9 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM_{10} and VOC testing using methods approved by the Commissioner. PM_{10} includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.10 Particulate Matter (PM and PM₁₀) and Volatile Organic Compounds (VOC)

- (a) In order to comply with conditions D.1.1, D.1.2, D.1.3, D.1.5, and D.1.6, the afterburner (CE-01) for PM, PM₁₀, and VOC control shall be in operation at all times the asphalt blowing still is in operation.
- (b) In order to comply with Condition D.1.6 the knock-out tank (CD-02) shall be in operation at all times the asphalt blowing still is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.11 Afterburner [40 CFR 60, Subpart UU] [326 IAC 12]

- (a) The afterburner (CE-01) shall operate at all times that the process is in operation. When operating, the afterburner shall maintain a minimum operating temperature of 1300 °F during operation until a temperature has been determined from the most recent compliant stack test, as approved by IDEM.
- (b) Pursuant to 40 CFR 60.473(b), a continuous monitoring system shall be calibrated, maintained, and operated on the afterburner for measuring operating temperature in the combustion zone. The output of this system shall be recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The monitoring instrument shall have an accuracy of ±10 °C (±18 °F).

D.1.12 Visible Emissions Notations

- (a) Visible emission notations of the asphalt blowing still stack exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

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- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.13 Record Keeping Requirements

- (a) To document compliance with Condition D.1.11, the Permittee shall maintain records of the operating temperature of the afterburner.
- (b) To document compliance with Condition D.1.12, the Permittee shall maintain records of visible emission notations of the asphalt blowing still stack exhaust once per shift.
- (c) To document compliance with Condition D.1.7, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements of this permit.

D.1.14 Reporting Requirements

Pursuant to 40 CFR 60.474, the Permittee shall, upon completion of the performance test required in Condition D.1.8, report the results of the stack tests and the afterburner temperature records to IDEM, OAQ and OES.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (b) One (1) natural gas-fired boiler, identified as SB-01, with a maximum heat input capacity of 6.7 MMBtu per hour and exhausting at stack SB-01. This boiler was constructed in 1959 and uses fuel oil No.2 as an alternative fuel.
- (c) One (1) natural gas-fired boiler, identified as SB-02, with a maximum heat input capacity of 24.25 MMBtu per hour and exhausting at stack SB-02. This boiler was constructed in March 1994 and uses fuel oil No.2 as an alternative fuel.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Sulfur Dioxide (SO₂) Emission Limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the amount of No. 2 fuel oil burned in the boilers (SB-01 and SB-02), the 11.6 MMBtu/hour asphalt heater (PH-01) (Section D.3), and the heaters (Section D.4) shall not exceed 2,802,817 gallons of No. 2 fuel oil per twelve (12) consecutive month period with compliance determined at the end of each month. The sulfur content of the fuel oil shall not exceed 0.5% by weight. These limitations are equivalent to 99.5 tons of sulfur dioxide per twelve (12) consecutive month period and limits the sulfur dioxide emissions from the entire source to less than one hundred (100) tons per year. Therefore, the provisions of 326 IAC 2-7 are not applicable.

D.2.2 Sulfur Dioxide (SO₂) Emission Limit for Boiler SB-02 [326 IAC 2-2]

Pursuant to CP 930098-01, issued March 12, 1993 and revised by this permit, boiler SB-02 shall be limited to the following:

- (a) The number of gallons of fuel oil No.2 burned in boiler SB-02 shall not exceed 1,125,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The emissions of sulfur dioxide shall not exceed 0.5 lbs per MMBtu heat input.

These limits are equivalent to 39.9 tons of SO_2 per twelve (12) consecutive month period, which is less than the 40 tons per twelve (12) consecutive month period significance level for PSD applicability. Therefore, compliance with these limitations makes 326 IAC 2-2 not applicable to boiler SB-02.

D.2.3 Particulate Matter Limitation (PM) [326 IAC 6-1-2(b)]

Pursuant to 326 IAC 6-1-2(b)(4) and (5) (Nonattainment Area Limitations), the particulate matter emissions from boilers SB-01 and SB-02 shall be limited to 0.15 pounds per million Btu when burning fuel oil, and 0.01 grains per dry standard cubic foot when burning natural gas.

D.2.4 General Provision Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to boiler SB-02 except when otherwise specified in 40 CFR 60, Subpart Dc.

D.2.5 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 12-1][40 CFR 60, Subpart Dc]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

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- (a) The SO₂ emissions from the oil-fueled boiler SB-02 shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

D.2.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for boiler SB-02

Compliance Determination Requirements

D.2.7 Sulfur Dioxide Emissions and Sulfur Content [40 CFR 60, Subpart Dc]

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.2.8 Visible Emissions Notations

- (a) Visible emission notations of boiler SB-02 stack exhaust shall be performed once per shift during normal daylight operations when combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.9 Record Keeping Requirements

(a) To document compliance with Conditions D.2.1, D.2.2, D.2.4, and D.2.5 the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40

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CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions:
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.2.8, the Permittee shall maintain records of visible emission notations of boiler SB-02 stack exhaust once per shift when combusting No. 2 fuel oil.
- (c) To document compliance with Condition D.2.6, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.2.10 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.2 shall be submitted to the addresses listed in Section C General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). This is the same report as required in Condition D.3.5 and D.4.3.
- (b) A semi-annual natural gas fired boiler certification, shall be submitted to the addresses listed in Section C General Reporting Requirements, using the reporting forms located at the end of this permit within thirty (30) days after the end of the six month period being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(d) One (1) natural gas-fired asphalt heater, identified as PH-01, with a maximum heat input capacity of 11.6 MMBtu per hour and exhausting at stack PH-01. This heater was constructed in 1960 and uses fuel oil No.2 as an alternative fuel.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Sulfur Dioxide (SO₂) Emission Limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the amount of No. 2 fuel oil burned in the boilers (SB-01 and SB-02) (Section D.2), the 11.6 MMBtu/hour asphalt heater (PH-01), and the heaters (Section D.4) shall not exceed 2,802,817 gallons of No. 2 fuel oil per twelve (12) consecutive month period with compliance determined at the end of each month. The sulfur content of the fuel oil shall not exceed 0.5% by weight. These limitations are equivalent to 99.5 tons of sulfur dioxide per twelve (12) consecutive month period and limits the sulfur dioxide emissions from the entire source to less than one hundred (100) tons per year. Therefore, the provisions of 326 IAC 2-7 are not applicable.

D.3.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations), the SO_2 emissions from the heater (PH-01) shall not exceed five-tenths (0.5) pound per million Btu heat input while combusting fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day calendar month average.

D.3.3 Particulate Matter Limitation [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Limitations), the particulate matter emissions from the 11.6 MMBtu per hour heater (identified as PH-01) shall be limited to 0.03 grains per dry standard cubic foot, when firing on fuel oil.

Compliance Determination Requirements

D.3.4 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the thirteen (13) MMBtu per hour heater, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1 and D.3.2, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period.

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (e) Six (6) oil heaters, consisting of:
 - One (1) 3.5 MMBtu per hour oil heater, identified as HO-01, exhausting through stack HO-01 and fired using natural or fuel oil No.2. This heater was constructed in 1967.
 - Two (2) 3.54 MMBtu per hour oil heater, identified as HO-03 and HO-04, exhausting through stacks HO-03 and HO-04, and fired using natural or fuel oil No.2. Heater HO-03 and heater HO-04 were constructed in 1982.
 - One (1) 10.0 MMBtu per hour oil heater, identified as HO-05, exhausting through stack HO-05 and fired using natural or fuel oil No.2. This heater was constructed in 1994.
 - (4) Two (2) 4.2 MMBtu per hour oil heater, identified as HO-06 and HO-07, exhausting through stack HO-06 and HO-07 and fired using natural or fuel oil No.2. Heater HO-06 was constructed in 1975 and heater HO-07 was constructed in 1980.
- (f) Two (2) 2.5 MMBtu per hour tank tube heaters, identified as TH-37 and TH-42, exhausting through stacks TH-37 and TH-42, and fired using natural or fuel oil No.2. These units were constructed in 1987.

Insignificant Activities:

- (a) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight, including:
 - (1) One (1) 2.0 MMBtu per hour oil heater, identified as HO-02, exhausting through stack HO-02 and fired using natural or fuel oil No.2. This heater was constructed in 1959.
 - One (1) 0.5 MMBtu per hour tank tube heater, identified as TH-34, exhausting through stack TH-34 and fired using natural or fuel oil No.2. This heater was constructed in 1995.
 - (3) One (1) 1.12 MMBtu per hour tank tube heater, identified as TH-43, exhausting through stack TH-43 and fired using natural or fuel oil No.2. This heater was constructed in 1980.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.4.1 Sulfur Dioxide (SO₂) Emission Limit [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the amount of No. 2 fuel oil burned in the boilers (SB-01 and SB-02) (Section D.2), the 11.6 MMBtu/hour asphalt heater (PH-01) (Section D.3), and the heaters described in this section shall not exceed 2,802,817 gallons of No. 2 fuel oil per twelve (12) consecutive month period with compliance determined at the end of each month. The sulfur content of the fuel oil shall not exceed 0.5% by weight. These limitations are equivalent to 99.5 tons of sulfur dioxide per twelve (12) consecutive month period and limits the sulfur dioxide emissions from the entire source to less than one hundred (100) tons per year. Therefore, the provisions of 326 IAC 2-7 are not applicable.

D.4.2 Particulate Matter Limitations [326 IAC 6-1-2(a)]

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Limitations), the particulate matter emissions from the heaters shall be limited to 0.03 grains per dry standard cubic foot, when firing on fuel oil.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.4.3 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions:
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period.

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications.
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (b) Fifty-Eight (58) storage tanks with volatile organic compound emissions equal to or less than 3 pounds per hour and 15 pounds per day, and HAP emissions equal to or less than 5 pounds per day and 1 ton per year of a single HAP and 12.5 pounds per day and 2.5 ton per year of any combination of HAPs, including:
 - (1) Four (4) storage tanks (identified as ST-001, ST-002, ST-003, and ST-004), used to store petroleum asphalt, each having a maximum storage capacity of 210,990 gallons. These storage tanks were constructed in 1959.
 - (2) One (1) storage tank (identified as ST-005), used to store tall oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2001.
 - One (1) storage tank (identified as ST-006), used to store tall oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2001.
 - (4) One (1) storage tank (identified as ST-007), used to store petroleum asphalt, having a maximum storage capacity of 215,913 gallons. This storage tank was constructed in 1980.
 - One (1) storage tank (identified as ST-008), used to store tall oil, having a maximum storage capacity of 8,300 gallons. This storage tank was constructed in 1990.
 - (6) One (1) storage tank (identified as ST-009), used to store asphalt product, having a maximum storage capacity of 64,173 gallons. This storage tank was constructed in 1959.
 - (7) One (1) storage tank (identified as ST-010), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was constructed in 1998.
 - (8) One (1) storage tank (identified as ST-011), used to store asphalt emulsion, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1998.
 - (9) One (1) storage tank (identified as ST-012), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was constructed in 1999.
 - (10) One (1) storage tank (identified as ST-013), used to store asphalt emulsion, each having a maximum storage capacity of 64,173 gallons. These storage tanks were constructed in 1959.
 - (11) One (1) storage tank (identified as ST-014), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was installed in 1999.
 - (12) Four (4) storage tanks (identified as ST-016, ST-017, ST-018, and ST-019), used to store asphalt emulsion, each having a maximum storage capacity of 21,151 gallons. These storage tanks were constructed in 1959.
 - (13) One (1) storage tank (identified as ST-015), used to store asphalt emulsion, having a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
 - One (1) storage tank (identified as ST-020), used to store tall oil, having a maximum storage capacity of 20,368 gallons. This storage tank was constructed in 1959.
 - (15) One (1) storage tank (identified as ST-021), used to store aqueous solutions of water with 5% oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2000.

SECTION D.5

FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (16) One (1) storage tank (identified as ST-022), used to store distillate fuel oil, having a maximum storage capacity of 20,080 gallons. This storage tank was constructed in 1988.
- (17) One (1) storage tank (identified as ST-023), used to store petroleum asphalt, with a maximum storage capacity of 20,728 gallons. This storage tank was constructed in 1959.
- (18) One (1) storage tank (identified as ST-024), used to store petroleum asphalt, with a maximum storage capacity of 22,995 gallons. This storage tank was constructed in 1959.
- (19) One (1) storage tank (identified as ST-025), used to store petroleum asphalt, having a maximum storage capacity of 424,484 gallons. This storage tank was constructed in 1968.
- (20) One (1) storage tank (identified as ST-028), used to store asphalt product, having a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- (21) One (1) storage tank (identified as ST-029), used to store asphalt product, with a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- (22) One (1) storage tank (identified as ST-030), used to store sodium hydroxide, having a maximum storage capacity of 15,222 gallons. This storage tank was constructed in 1959.
- (23) One (1) storage tank (identified as ST-031), used to store distillate fuel oil, having a maximum storage capacity of 15,222 gallons. This storage tank was constructed in 1959.
- (24) One (1) storage tank (identified as ST-032), used to store petroleum asphalt, having a maximum storage capacity of 64,173 gallons. This storage tank was constructed in 1959.
- (25) One (1) storage tank (identified as ST-033), used to store petroleum asphalt product, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1959.
- (26) One (1) storage tank (identified as ST-034), used to store petroleum asphalt product, having a maximum storage capacity of 59,720 gallons. This storage tank was constructed in 1998.
- (27) One (1) storage tank (identified as ST-035), used to store petroleum asphalt, having a maximum storage capacity of 210,990 gallons. This storage tank was constructed in 1959
- (28) One (1) storage tank (identified as ST-036), used to store petroleum asphalt, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1999
- (29) One (1) storage tank (identified as ST-037), used to store petroleum asphalt product, having a maximum storage capacity of 127,092 gallons. This storage tank was constructed in 1998.
- (30) One (1) storage tank (identified as ST-038), used to store petroleum asphalt, having a maximum storage capacity of 59,715 gallons. This storage tank was constructed in 1980.

SECTION D.5

FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (31) Two (2) storage tanks (identified as ST-039 and ST-40), used to store cutback asphalt, each having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1985.
- (32) One (1) storage tank (identified as ST-041), used to store petroleum asphalt, having a maximum storage capacity of 1,054,951 gallons. This storage tank was constructed in 1973.
- One (1) storage tank (identified as ST-042), used to store asphalt, having a maximum storage capacity of 20,728 gallons. This storage tank was constructed in 1975.
- One (1) storage tank (identified as ST-043), used to store asphalt, having a maximum storage capacity of 23,689 gallons. This storage tank was constructed in 1980.
- (35) One (1) storage tank (identified as ST-044), used to store fuel oil No.6, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1980.
- (36) One (1) storage tank (identified as ST-045), used to store petroleum asphalt, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1980.
- (37) One (1) storage tank (identified as ST-049), used to store anti-strip additive, having a maximum storage capacity of 7,774 gallons. This storage tank was constructed in 1987.
- (38) One (1) storage and processing tank (identified as ST-050), used to store multigrade asphalt, having a maximum storage capacity of 25,000 gallons. This storage tank was constructed in 1988.
- (39) One (1) storage and processing tank (identified as ST-051), used to store multigrade asphalt, having a maximum storage capacity of 25,000 gallons. This storage tank was constructed in 1987.
- (40) One (1) storage and processing overflow tank (identified as ST-052), used to store multigrade asphalt, having a maximum storage capacity of 5,264 gallons. This storage tank was constructed in 1987.
- (41) One (1) storage tank (identified as ST-053), used to store polyphosphoric acid, having a maximum storage capacity of 4,500 gallons. This storage tank will be constructed in 2002/2003.
- (42) Two (2) storage tanks (identified as ST-054 and ST-055), used to store asphalt, each having a maximum storage capacity of 30,104 gallons. These storage tanks will be constructed in 2003/2004.
- (43) Two (2) storage tanks (identified as ST-056 and ST-057), used to store asphalt, having a maximum storage capacity of 2,165,520 gallons and 4,265,856 gallons, respectively. These storage tanks will be constructed in 2002/2003.
- (44) Two (2) storage tanks (identified as ST-066 and ST-067), used to store petroleum asphalt, each having a maximum storage capacity of 210,000 gallons. These storage tanks were constructed in 1970.
- (45) One (1) storage tank (identified as ST-175), used to store petroleum asphalt, having a maximum storage capacity of 7,401,059 gallons. This storage tank was constructed in 1993.

SECTION D.5

FACILITY OPERATION CONDITIONS (Continued)

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (46) One (1) storage tank (identified as ST-803), used to store petroleum asphalt, having a maximum storage capacity of 3,352,388 gallons. This storage tank was constructed in 1970.
- (47) One (1) storage tank (identified as ST-560), used to store petroleum asphalt, having a maximum storage capacity of 2,350,080 gallons. This storage tank was constructed in 1970.
- (48) One (1) storage tank (identified as ST-260), used to store petroleum asphalt, having a maximum storage capacity of 1,054,951 gallons. This storage tank was constructed in 1970.
- (c) Processing units with volatile organic compound emissions equal to or less than 3 pounds per hour and 15 pounds per day, and HAP emissions equal to or less than 5 pounds per day and 1 ton per year of a single HAP and 12.5 pounds per day and 2.5 ton per year of any combination of HAPs, including the following sixty (60) storage tanks, including the following units:
 - (1) One (1) enclosed Asphalt Emulsion Colloid Shear Mill, constructed in 1960, having a maximum production capacity of 50.2 tons per hour.
 - (2) One (1) enclosed Multigrade Asphalt Colloid Shear Mill, constructed in 1980, having a maximum production capacity of 16.9 tons per hour.
 - (3) Two (2) blending tanks (identified as ST-026 and ST-027), constructed in 1972, each having a maximum storage capacity of 33,000 gallons.
 - (4) One (1) batch processing tank (identified as ST-048), constructed in 1987, having a maximum capacity of 1,170 gallons, and used to mix hot petroleum asphalt with additives before milling.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.5.1 General Provision Relating to NSPS [326 IAC 12-1] [40 CFR 60, Subpart A]

- (a) The provisions of 40 CFR 60, Subpart A General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the storage tanks ST-010, ST-011, ST-012, ST-014, ST-034, ST-036, ST-037, ST-039, ST-040, ST-050, ST-051, ST-052, ST-054, ST-055, ST-056, ST-057, and ST-175, except when otherwise specified in 40 CFR 60, Subpart UU.
- (b) The provisions of 40 CFR 60, Subpart A General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the storage tanks ST-005, ST-006, ST-010, ST-011, ST-015, ST-021, ST-022, ST-034, ST-036, ST-037, ST-039, ST-040, ST-050, ST-051, ST-054, ST-055, ST-056, ST-057, and ST-175.

D.5.2 NSPS Requirements [326 IAC 12-1] [40 CFR 60, Subpart UU]

Pursuant to the 40 CFR 60.472(c), no gases shall be discharged from any asphalt storage tank, subject to 40 CFR 60, Subpart UU, with an opacity greater than zero percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The following storage tanks are subject to this requirement: ST-034, ST-036, ST-037, ST-050, ST-051, ST-052, ST-054, ST-055, ST-056, ST-057, and ST-175.

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.5.3 Record Keeping Requirements [40 CFR 60, Subpart Kb][326 IAC 12-1]

Pursuant to 40 CFR 60, Subpart Kb (326 IAC 12), the Permittee shall maintain records of the dimensions and an analysis showing the capacity of the storage tanks ST-005, ST-006, ST-010, ST-011, ST-015, ST-021, ST-022, ST-034, ST-036, ST-037, ST-039, ST-040, ST-050, ST-051, ST-054, ST-055, ST-056, ST-057, and ST-175. These records shall be maintained for the life of the source.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY AND THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Asphalt Materials, Inc.

Source Address: 4902 West 86th Street, Indianapolis, Indiana 46268 Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268

FESOP No.: F097-6035-00098

| This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. |
|---|
| Please check what document is being certified: |
| 9 Annual Compliance Certification Letter |
| 9 Test Result (specify) |
| 9 Report (specify) |
| 9 Notification (specify) |
| 9 Affidavit (specify) |
| 9 Other (specify) |
| |
| I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. |
| Signature: |
| Printed Name: |
| Title/Position: |
| Date: |

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY AND THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674

Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Asphalt Materials, Inc.

Source Address: 4902 West 86th Street, Indianapolis, Indiana 46268 Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268

FESOP No.: F097-6035-00098

| This form | consists | of 2 | paq | es |
|-----------|----------|------|-----|----|
|-----------|----------|------|-----|----|

Date/Time Emergency started:

Page 1 of 2

| 9 | This is | an emergency a | s defined in | 1 326 IAC 2 | 2-7-1(12) |
|---|---------|----------------|--------------|-------------|-----------|
|---|---------|----------------|--------------|-------------|-----------|

CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

| Facility/Equipment/Operation: | |
|--|-------------|
| Control Equipment: | |
| Permit Condition or Operation Limitation in Permit: | |
| Description of the Emergency: | |
| Describe the cause of the Emergency: | |
| If any of the following are not applicable, mark N/A | Page 2 of 2 |

| Date/Time Emergency was corrected: |
|---|
| Was the facility being properly operated at the time of the emergency? Y N Describe: |
| Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _X , CO, Pb, other: |
| Estimated amount of pollutant(s) emitted during emergency: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |
| Form Completed by: Title / Position: Date: Phone: |

A certification is not required for this report.

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION AND THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Asphalt Materials, Inc.

Source Address: 4902 West 86th Street, Indianapolis, Indiana 46268 Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268

FESOP No.: F097-6035-00098

Facility: Boilers SB-01 and SB-02

| 9 | Natural Gas Only Alternate Fuel burned | |
|---------|---|--|
| | From: | To: |
| | | |
| | | nation and belief formed after reasonable inquiry, the statements and re true, accurate, and complete. |
| Signa | ture: | |
| Printe | ed Name: | |
| Title/F | Position: | |
| Phone | e: | |
| Date: | | |

A certification by the authorized individual as defined by 326 IAC 2-1.1-1 is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION AND THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

FESOP Quarterly Report

| Source Name: | Asphalt Materials, Inc. |
|-----------------|--|
| Source Address: | 4902 West 86th Street, Indianapolis, Indiana 46268 |

Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268

FESOP No.: F097-6035-00098

Facility: Boilers (SB-01and SB-02) and heaters (PH-01, HO-01 through HO-07, TH-34, TH-

37, TH-42 and TH-43)

Parameter: Fuel Oil No. 2 usage

Limit: 2,802,817 gallons of No. 2 Fuel Oil with a sulfur content of less than or equal to 0.5%

by weight. Compliance shall be determined at the end of each month.

YEAR: _____

| | Colu | mn 1 | Col | umn 2 | Column 1 - | Column 2 |
|---------|----------------------------|--------------------------|----------------------------|-----------------------|----------------------------|--------------------------|
| Month | This Month | | Previous 11 Months | | 12 Month Total | |
| | Fuel Oil Usage (gal) | Sulfur Content (%) | Fuel Oil Usage (gal) | Sulfur Content (%) | Fuel Oil Usage (gal) | Sulfur Content (%) |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |

- 9 No deviation occurred in this guarter.
- 9 Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by:
Title / Position:
Signature:
Date:
Phone:

Attach a signed certification to complete this report.

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION AND THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

FESOP Quarterly Report

| Source Name: | Asphalt Materials, Inc. |
|-----------------|--|
| Source Address: | 4902 West 86th Street, Indianapolis, Indiana 4 |

Source Address: 4902 West 86th Street, Indianapolis, Indiana 46268 Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268

FESOP No.: F097-6035-00098
Facility: Boiler SB-02
Parameter: Fuel Oil No. 2 usage

Phone:

Limit: 1,125,000 gallons per twelve (12) consecutive month period with compliance

determined at the end of each month.

| | Column 1 | | Column 2 | | Column 1 + Column 2 | |
|---------|------------|--|--------------------|--|---------------------|--|
| Month | This Month | | Previous 11 Months | | 12 Month Total | |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |

| 9 No deviation occurred in the | บร quarter. |
|--------------------------------|-------------|
|--------------------------------|-------------|

| 9 | | s occurred in this quarter. nas been reported on: | |
|-------|-----------------------------------|--|--|
| Title | mitted by: e / Position: nature: | | |

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION AND THE CITY OF INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Asphalt Materials, Inc. Source Address: 4902 West 86th Street, Indianapolis, Indiana 46268 Mailing Address: 5400 West 86th Street, Indianapolis, Indiana 46268 FESOP No.: F097-6035-00098 Months: _____ to _____ Year: _____ Page 1 of 2 This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD **Permit Requirement** (specify permit condition #) **Duration of Deviation: Date of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken: Permit Requirement** (specify permit condition #) **Duration of Deviation: Date of Deviation: Number of Deviations: Probable Cause of Deviation: Response Steps Taken:**

Page 2 of 2

| | : age = er = | | | | |
|---|------------------------|--|--|--|--|
| Permit Requirement (specify permit condition #) | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | |
| Number of Deviations: | | | | | |
| Probable Cause of Deviation: | | | | | |
| Response Steps Taken: | | | | | |
| Permit Requirement (specify permit condition #) | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | |
| Number of Deviations: | | | | | |
| Probable Cause of Deviation: | | | | | |
| Response Steps Taken: | | | | | |
| Permit Requirement (specify permit condition #) | | | | | |
| Date of Deviation: | Duration of Deviation: | | | | |
| Number of Deviations: | | | | | |
| Probable Cause of Deviation: | | | | | |
| Response Steps Taken: | | | | | |
| Form Completed By: | | | | | |
| Title/Position: | | | | | |
| | | | | | |
| Date: | <u> </u> | | | | |
| Phone: | | | | | |

Attach a signed certification to complete this report.

Attachment A

The following state rule have been adopted by reference by the Indianapolis Air Pollutant Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

- (1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
- (2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
- (3) 326 IAC 1-3-1 through 1-3-4;
- (4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
- (5) 326 IAC 1-5-1 through 1-5-5;
- (6) 326 IAC 1-6-1 through 1-6-6;
- (7) 326 IAC 1-7-1 through 1-7-5
- (8) 326 IAC 2-3-1 through 2-3-5;
- (9) 326 IAC 2-4-1 through 2-4-6;
- (10) 326 IAC 2-6-1 through 2-6-4;
- (11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
- (12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
- (13) 326 IAC 2-9-1 through 2-9-14;
- (14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language "state or local" immediately after the word "federal" in 326 IAC 2-10-1);
- (15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language "federal, state or local" immediately after the word "by" in 326 IAC 2-11-1);
- (16) 326 IAC 3-1.1-1 through 3-1.1-5;
- (17) 326 IAC 3-2.1-1 through 3-2.1-5;
- (18) 326 IAC 3-3-1 through 3-3-5;
- (19) 326 IAC 4-2-1 through 4-2-2;
- (20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
- (21) 326 IAC 7-1.1-1 and 7-1.1-2;
- (22) 326 IAC 7-2-1;
- (23) 326 IAC 7-3-1 and 7-3-2;
- (24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
- (25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (i), 8-1-5 through 8-1-12;
- (26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
- (27) 326 IAC 8-3-1 through 8-3-7;
- (28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
- (29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
- (30) 326 IAC 8-6-1 and 8-6-2;
- (31) 326 IAC 9-1-1 and 9-1-2;
- (32) 326 IAC 11-1-1 through 11-1-2;
- (33) 326 IAC 11-2-1 through 11-2-3;
- (34) 326 IAC 11-3-1 through 11-3-6;
- (35) 326 IAC 14-1-1 through 14-1-4;

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

(62)

Attachment A continued

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(36)
       326 IAC 14-2-1 except 40 CFR 61.145;
(37)
       326 IAC 14-3-1;
(38)
       326 IAC 14-4-1;
(39)
       326 IAC 14-5-1;
(40)
       326 IAC 14-6-1;
       326 IAC 14-7-1;
(41)
(42)
       326 IAC 14-8-1 through 14-8-5;
(43)
       326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;
       326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that "permitting
(44)
       authority" means the commissioner of IDEM or the administrator of OES, whichever is
       applicable);
       326 IAC 20-2-1;
(45)
(46)
       326 IAC 20-3-1;
(47)
       326 IAC 20-4-1;
(48)
       326 IAC 20-5-1;
       326 IAC 20-6-1;
(49)
(50)
       326 IAC 20-7-1;
(51)
       326 IAC 20-8-1;
(52)
       326 IAC 20-9-1;
(53)
       326 IAC 20-14-1;
(54)
       326 IAC 20-15-1;
(55)
       326 IAC 20-16-1;
(56)
       326 IAC 20-17-1;
(57)
       326 IAC 20-18-1;
       326 IAC 20-19-1;
(58)
(59)
       326 IAC 20-20-1;
(60)
       326 IAC 20-21-1;
       326 IAC 21-1-1 (The adoption states that "or the administrator of OES" is added in (b));
(61)
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326 IAC 22-1-1 (The adoption states that "or the administrator of OES" is added in (b)).

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

Attachment B Fugitive PM Control Plan For Asphalt Materials, Inc.

5400 West 86th Street Indianapolis, Indiana 46268 F097-6035-00098

(Submitted June 26, 1996)

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), the fugitive particulate matter emissions from plant roadways and parking lots shall be controlled by:

- (a) Applying a dust suppressant, such as water or an asphalt emulsion, to road and parking lot surfaces when needed.
- (b) The dust suppressant will be sprayed on roadway surfaces on an as-needed basis, contingent upon precipitation events and humidity.
- (c) Vehicle traffic speeds on unpaved roadways will be limited to 10 miles per hour.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name: Asphalt Materials, Inc.

Source Location: 4902 West 86th Street, Indianapolis, Indiana 46268

County: Marion
SIC Code: 2951/2952
Operation Permit No.: F097-6035-00098

Permit Reviewer: ERG/AAB

The Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) have reviewed a FESOP application from Asphalt Materials, Inc. relating to the operation of a asphalt emulsion blending and asphalt oxidation plant.

This FESOP permit contains provisions intended to satisfy the requirements of the construction permit rules.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) natural gas-fired boiler, identified as SB-01, with a maximum heat input capacity of 6.7 MMBtu per hour and exhausting at stack SB-01. This boiler was constructed in 1959 and uses fuel oil No.2 as an alternative fuel.
- (b) One (1) natural gas-fired boiler, identified as SB-02, with a maximum heat input capacity of 24.25 MMBtu per hour and exhausting at stack SB-02. This boiler was constructed in March 1994 and uses fuel oil No.2 as an alternative fuel.
- (c) One (1) natural gas-fired asphalt heater, identified as PH01, with a maximum heat input capacity of 11.6 MMBtu per hour and exhausting at stack PH-01. This heater was constructed in 1960 and uses fuel oil No.2 as an alternative fuel.
- (d) Six (6) oil heaters, consisting of:
 - (1) One (1) 3.5 MMBtu per hour oil heater, identified as HO-01, exhausting through stack HO-01 and fired using natural or fuel oil No.2. This heater was constructed in 1967.
 - (2) Two (2) 3.54 MMBtu per hour oil heater, identified as HO-03 and HO-04, exhausting through stacks HO-03 and HO-04, and fired using natural or fuel oil No.2. Heater HO-03 and heater HO-04 were constructed in 1982.

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

- One (1) 10.0 MMBtu per hour oil heater, identified as HO-05, exhausting through stack HO-05 and fired using natural or fuel oil No.2. This heater was constructed in 1994.
- (4) Two (2) 4.2 MMBtu per hour oil heater, identified as HO-06 and HO-07, exhausting through stack HO-06 and HO-07 and fired using natural or fuel oil No.2. Heater HO-06 was constructed in 1975 and heater HO-07 was constructed in 1980.
- (e) Two (2) 2.5 MMBtu per hour tank tube heaters, identified as TH-37 and TH-42, exhausting through stacks TH-37 and TH-42, and fired using natural or fuel oil No.2. These units were constructed in 1987.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(a) One (1) Asphalt Blowing Still (identified as ST-047), constructed in 1996, having a maximum capacity of 12 tons per hour, with emissions exhausted to a 5,000-gallon, condensate vapor knock-out tank (identified as ST-046 and constructed in 1996). The knock-out tank exhausts to a 7.5 MMBtu per hour, natural gas-fired afterburner (identified as CE-01), used to control emissions of VOC, exhausting at stack CE-02.

[Note: The source applied for a construction permit in May 1995; however, no construction permit was issued for this construction because these units were considered replacements of existing equipment with no increase in potential emissions for the source].

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight, including:
 - (1) One (1) 2.0 MMBtu per hour oil heater, identified as HO-02, exhausting through stack HO-02 and fired using natural or fuel oil No.2. This heater was constructed in 1959.
 - (2) One (1) 0.5 MMBtu per hour tank tube heater, identified as TH-34, exhausting through stack TH-34 and fired using natural or fuel oil No.2. This heater was constructed in 1995.
 - (3) One (1) 1.12 MMBtu per hour tank tube heater, identified as TH-43, exhausting through stack TH-43 and fired using natural or fuel oil No.2. This heater was constructed in 1980.
- (b) Fifty-Eight (58) storage tanks with volatile organic compound emissions equal to or less than 3 pounds per hour and 15 pounds per day, and HAP emissions equal to or less than 5 pounds per day and 1 ton per year of a single HAP and 12.5 pounds per day and 2.5 ton per year of any combination of HAPs, including:
 - (1) Four (4) storage tanks (identified as ST-001, ST-002, ST-003, and ST-004), used to store petroleum asphalt, each having a maximum storage capacity of 210,990 gallons. These storage tanks were constructed in 1959.

- (2) One (1) storage tank (identified as ST-005), used to store tall oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2001.
- (3) One (1) storage tank (identified as ST-006), used to store tall oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2001.
- (4) One (1) storage tank (identified as ST-007), used to store petroleum asphalt, having a maximum storage capacity of 215,913 gallons. This storage tank was constructed in 1980.
- (5) One (1) storage tank (identified as ST-008), used to store tall oil, having a maximum storage capacity of 8,300 gallons. This storage tank was constructed in 1990.
- (6) One (1) storage tank (identified as ST-009), used to store asphalt product, having a maximum storage capacity of 64,173 gallons. This storage tank was constructed in 1959.
- (7) One (1) storage tank (identified as ST-010), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was constructed in 1998.
- (8) One (1) storage tank (identified as ST-011), used to store asphalt emulsion, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1998.
- (9) One (1) storage tank (identified as ST-012), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was constructed in 1999.
- (10) One (1) storage tank (identified as ST-013), used to store asphalt emulsion, each having a maximum storage capacity of 64,173 gallons. These storage tanks were constructed in 1959.
- (11) One (1) storage tank (identified as ST-014), used to store asphalt emulsion, having a maximum storage capacity of 42,302 gallons. This storage tank was installed in 1999.
- (12) Four (4) storage tanks (identified as ST-016, ST-017, ST-018, and ST-019), used to store asphalt emulsion, each having a maximum storage capacity of 21,151 gallons. These storage tanks were constructed in 1959.
- (13) One (1) storage tank (identified as ST-015), used to store asphalt emulsion, having a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- (14) One (1) storage tank (identified as ST-020), used to store tall oil, having a maximum storage capacity of 20,368 gallons. This storage tank was constructed in 1959.
- (15) One (1) storage tank (identified as ST-021), used to store aqueous solutions of water with 5% oil, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 2000.

- (16) One (1) storage tank (identified as ST-022), used to store distillate fuel oil, having a maximum storage capacity of 20,080 gallons. This storage tank was constructed in 1988.
- (17) One (1) storage tank (identified as ST-023), used to store petroleum asphalt, with a maximum storage capacity of 20,728 gallons. This storage tank was constructed in 1959.
- (18) One (1) storage tank (identified as ST-024), used to store petroleum asphalt, with a maximum storage capacity of 22,995 gallons. This storage tank was constructed in 1959.
- (19) One (1) storage tank (identified as ST-025), used to store petroleum asphalt, having a maximum storage capacity of 424,484 gallons. This storage tank was constructed in 1968.
- (20) One (1) storage tank (identified as ST-028), used to store asphalt product, having a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-029), used to store asphalt product, with a maximum storage capacity of 21,151 gallons. This storage tank was constructed in 1959.
- (22) One (1) storage tank (identified as ST-030), used to store sodium hydroxide, having a maximum storage capacity of 15,222 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-031), used to store distillate fuel oil, having a maximum storage capacity of 15,222 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-032), used to store petroleum asphalt, having a maximum storage capacity of 64,173 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-033), used to store petroleum asphalt product, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1959.
- One (1) storage tank (identified as ST-034), used to store petroleum asphalt product, having a maximum storage capacity of 59,720 gallons. This storage tank was constructed in 1998.
- (27) One (1) storage tank (identified as ST-035), used to store petroleum asphalt, having a maximum storage capacity of 210,990 gallons. This storage tank was constructed in 1959.
- (28) One (1) storage tank (identified as ST-036), used to store petroleum asphalt, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1999.
- One (1) storage tank (identified as ST-037), used to store petroleum asphalt product, having a maximum storage capacity of 127,092 gallons. This storage tank was constructed in 1998.

- (30) One (1) storage tank (identified as ST-038), used to store petroleum asphalt, having a maximum storage capacity of 59,715 gallons. This storage tank was constructed in 1980.
- (31) Two (2) storage tanks (identified as ST-039 and ST-40), used to store cutback asphalt, each having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1985.
- (32) One (1) storage tank (identified as ST-041), used to store petroleum asphalt, having a maximum storage capacity of 1,054,951 gallons. This storage tank was constructed in 1973.
- (33) One (1) storage tank (identified as ST-042), used to store asphalt, having a maximum storage capacity of 20,728 gallons. This storage tank was constructed in 1975.
- One (1) storage tank (identified as ST-043), used to store asphalt, having a maximum storage capacity of 23,689 gallons. This storage tank was constructed in 1980.
- One (1) storage tank (identified as ST-044), used to store fuel oil No.6, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1980.
- (36) One (1) storage tank (identified as ST-045), used to store petroleum asphalt, having a maximum storage capacity of 30,104 gallons. This storage tank was constructed in 1980.
- One (1) storage tank (identified as ST-049), used to store anti-strip additive, having a maximum storage capacity of 7,774 gallons. This storage tank was constructed in 1987.
- (38) One (1) storage and processing tank (identified as ST-050), used to store multigrade asphalt, having a maximum storage capacity of 25,000 gallons. This storage tank was constructed in 1988.
- (39) One (1) storage and processing tank (identified as ST-051), used to store multigrade asphalt, having a maximum storage capacity of 25,000 gallons. This storage tank was constructed in 1987.
- (40) One (1) storage and processing overflow tank (identified as ST-052), used to store multigrade asphalt, having a maximum storage capacity of 5,264 gallons. This storage tank was constructed in 1987.
- (41) One (1) storage tank (identified as ST-053), used to store polyphosphoric acid, having a maximum storage capacity of 4,500 gallons. This storage tank will be constructed in 2002/2003.
- (42) Two (2) storage tanks (identified as ST-054 and ST-055), used to store asphalt, each having a maximum storage capacity of 30,104 gallons. These storage tanks will be constructed in 2003/2004.
- (43) Two (2) storage tanks (identified as ST-056 and ST-057), used to store asphalt, having a maximum storage capacity of 2,165,520 gallons and 4,265,856 gallons, respectively. These storage tanks will be constructed in 2002/2003.

- (44) Two (2) storage tanks (identified as ST-066 and ST-067), used to store petroleum asphalt, each having a maximum storage capacity of 210,000 gallons. These storage tanks were constructed in 1970.
- (45) One (1) storage tank (identified as ST-175), used to store petroleum asphalt, having a maximum storage capacity of 7,401,059 gallons. This storage tank was constructed in 1993.
- (46) One (1) storage tank (identified as ST-803), used to store petroleum asphalt, having a maximum storage capacity of 3,352,388 gallons. This storage tank was constructed in 1970.
- (47) One (1) storage tank (identified as ST-560), used to store petroleum asphalt, having a maximum storage capacity of 2,350,080 gallons. This storage tank was constructed in 1970.
- (48) One (1) storage tank (identified as ST-260), used to store petroleum asphalt, having a maximum storage capacity of 1,054,951 gallons. This storage tank was constructed in 1970.
- (c) Processing units with volatile organic compound emissions equal to or less than 3 pounds per hour and 15 pounds per day, and HAP emissions equal to or less than 5 pounds per day and 1 ton per year of a single HAP and 12.5 pounds per day and 2.5 ton per year of any combination of HAPs, including the following sixty (60) storage tanks, including the following units:
 - (1) One (1) enclosed Asphalt Emulsion Colloid Shear Mill, constructed in 1960, having a maximum production capacity of 40.0 tons per hour.
 - One (1) enclosed Multigrade Asphalt Colloid Shear Mill, constructed in 1980, having a maximum production capacity of 16.9 tons per hour.
 - (3) Two (2) blending tanks (identified as ST-026 and ST-027), constructed in 1972, each having a maximum storage capacity of 33,000 gallons.
 - (4) One (1) batch processing tank (identified as ST-048), constructed in 1987, having a maximum capacity of 1,170 gallons, and used to mix hot petroleum asphalt with additives before milling.
- (d) Paved and unpaved roads and parking lots with public access.

Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) Construction Permit No.098-01, issued March 12, 1993.
- (b) Operating Permit No.0098-01, issued October 11, 1993; and
- (c) Construction Permit No.940098-01, issued May 25, 1994.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this FESOP permit.

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All facilities previously permitted have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would read new pre-construction approval before beginning construction.

(b) Construction Permit No.098-01, issued March 12, 1993.

Condition No.4: The Permittee is restricted to 3,000 hours per year for the combustion of #2 fuel oil.

Reason not incorporated: In the proposed permit, this condition has been revised from an hourly operation limit to a fuel usage limit for boiler SB-02. Note that 3,000 hours burning fuel oil No.2 was equivalent to 18.19 tons of sulfur dioxide per twelve (12) consecutive month period based on the AP-42 emission factor current at the time the permit was issued. The new limit of 1,125,000 gallons of fuel oil No.2 per twelve (12) consecutive month period is also equivalent to 39.9 tons of sulfur dioxide per year.

Enforcement Issue

- (a) IDEM is aware that the source failed to perform a stack test for PM emissions on the exhaust to the afterburner used to control emissions from the asphalt blowing still. This blowing still was installed in 1996 and was subject to the testing and other requirements of the NSPS 40 CFR 60, Subpart UU (Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacturing). The stack testing should have been performed within sixty days of achieving the maximum production rate or not later than 180 days after initial startup. [Note: The source was not previously required and has not performed PM10 stack tests to demonstrate compliance with 326 IAC 2-2 and 326 IAC 2-8.]
- (b) IDEM and OES are reviewing this matter and will take appropriate action. Section D.1 includes a requirement for PM stack testing within 180 days of issuance of this proposed permit. This condition will satisfy the requirements of 40 CFR 60, Subpart UU.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on June 3, 1996. Additional information was received on September 6, 2002 and October 11, 2002.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 through 25 in Appendix A)

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|-----------------|-------------------------------|
| PM | 1,269 |
| PM-10 | 1,269 |
| SO ₂ | 178 |
| VOC | 182 |
| CO | 32.3 |
| NO _x | 53.2 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

| HAP's | Potential To Emit (tons/year) | | |
|---------------------------------|-------------------------------|--|--|
| Polycyclic Organic Matter (POM) | 0.38 | | |
| TOTAL | 0.38 | | |

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀, SO₂, and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict PTE to below Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP).
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

| | Potential to Emit (tons/year) | | | | | | |
|--|----------------------------------|---------------|-----------------|-----------------------------------|------|-----------------|------|
| Process/facility | PM | PM-10 | SO ₂ | VOC | CO | NO _x | HAPs |
| Asphalt Blowing Still (ST-047) and Afterburner | 0.3 | Less than 0.3 | 0.002 | Less than 0.39 ^a | 0.28 | 0.33 | 0.01 |

| | Potential to Emit (tons/year) | | | | | | |
|--|----------------------------------|---------------|----------------------|----------------------|------|-----------------|------|
| Process/facility | PM | PM-10 | SO ₂ | VOC | СО | NO _x | HAPs |
| Boilers and Heaters ^a | 4.8 | 4.8 | Less than 99.5 | 0.66 | 9.48 | 31.0 | Neg. |
| Storage Tanks, Mixing tanks, and mills | | | | 1 | | | |
| Totals | 5.1 | Less than 5.1 | Less than 99.5 | Less than 40.7 | 9.76 | 31.0 | 0.01 |

Potential emissions based on fuel oil usage limit and sulfur content limit. Note this limit also allows for unlimited natural combustion in the boilers and heaters.

County Attainment Status

The source is located in Marion County.

| Pollutant | Status | | |
|-----------------|------------------------|--|--|
| PM-10 | Attainment | | |
| SO ₂ | Maintenance Attainment | | |
| NO ₂ | Attainment | | |
| Ozone | Maintenance Attainment | | |
| СО | Maintenance Attainment | | |
| Lead | Maintenance Attainment | | |

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone.

 Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone.
- (b) Marion County has been classified as attainment for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

- (a) The 6.7 MMBtu per hour boiler, SB-01, is not subject to the requirements of the New Source Performance Standards 40 CFR 60, Subparts D, Da, Db, or Dc because the boiler has a maximum heat input capacity that is less than 10 MMBtu per hour and was constructed prior to the applicability dates for these NSPSs.
- (b) The 24.25 MMBtu per hour boiler (identified as SB-02) is subject to the New Source Performance Standard, 40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) because this boiler was constructed after June 9, 1989 and has a maximum heat input capacity greater than 10 MMBtu/hr and less than 100 MMBtu/hr.

Pursuant to 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the sulfur content of the fuel oil burned in this boiler shall not exceed five-tenths percent (0.5%) by weight [40 CFR 60.42c(d)]. This fuel oil sulfur content limit applies at all times, including periods of

[&]quot;-" Pollutant not emitted.

startup, shutdown, and malfunction. The source must demonstrate compliance by either:

- (1) Providing vendor analysis of fuel delivered with vendor certification; or
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19. Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. If a partially empty fuel tank is refilled, a new sample and analysis would be required after filling.
- (c) This source is subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart UU (326 IAC 12) Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacturing, because this NSPS applies to asphalt storage tanks and blowing stills located at asphalt processing plants.

The asphalt blowing still (identified as ST-047) is subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart UU (326 IAC 12) - Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacturing, because this NSPS applies to any asphalt blowing still used for "roofing only or for roofing and other purposes, that commences construction or modification after November 18, 1980." Since the asphalt blowing still was installed at the plant in 1996, the blowing still is subject to the provisions of this NSPS and must comply with the following requirements:

- (1) Pursuant to 40 CFR 60.472(b), particulate matter emissions from the asphalt blowing still (identified as ST-047) shall not exceed the following limits:
 - (A) 1.3 pounds per ton of asphalt charged when a catalyst is added to the still.
 - (B) 1.2 pounds per ton of asphalt charged during blowing without a catalyst.
- (2) Pursuant to 40 CFR 60.472(b)(5), the opacity of the exhaust gases from the blowing still (identified as ST-047) shall not exceed zero percent.
- (3) Pursuant to 40 CFR 60.473(b), the Permittee shall continuously monitor and record the temperature in the combustion zone of the afterburner. The monitoring instrument shall have an accuracy of ±10 °C (±18 °F).
- (4) Pursuant to 40 CFR 60.473(d) and 40 CFR 60.7(d), the Permittee shall maintain records of the afterburner temperature readings for a period of at least five years.
- (5) Pursuant to 40 CFR 60.474(b) and 40 CFR 60.8, the Permittee shall conduct a performance test of the afterburner used to control emissions from the blowing still (unit ST-047) within one hundred and eighty (180) days of issuance of this permit, using test methods in 40 CFR 60, Appendix A or other methods or other methods approved by the Administrator. The Permittee shall determine compliance with the particulate matter standards as follows:
 - (A) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

 $E = C \times Q) / (P \times 7000 \text{gr/lb})$

Where:

E = Emission rate of particulate matter (lbs/ton)
C = Concentration of particulate matter (gr/dscf)
Q = Volumetric flow rate of effluent gas (dscf/hr)
P = Asphalt charging rate (ton/hr)

- (B) Method 5A shall be used to determine the particulate matter concentration (C) and volumetric flow rate (Q) of the effluent gas. The sampling time and sample volume for each run shall be at least 90 minutes or the duration of the coating blow or noncoating blow, whichever is greater, and 79.4 dscf.
- (C) The asphalt charging rate (P) shall be computed for each run using the following equation:

$$P = (V \times D) / (T \times 2000 \text{ lb/ton})$$

Where:

P = Asphalt charging rate (ton/hr)
V = Volume of asphalt charged (ft³)
D = Density of asphalt (lb/ft³)
T = Duration of test run (hrs)

The volume of asphalt charged (V) shall be measured by any means accurate to within ten (10) percent. The density (D) of the asphalt shall be computed using the following equation:

$$D = K_1 - (K_2 \times T_i)$$

Where:

D = Density of the asphalt (lb/ft^3)

 $K_1 = 64.70 \text{ lb/ft}^3$ $K_2 = 0.0694 \text{ lb/(ft}^3 \circ \text{F)}$

T_i = Temperature at the start of the blow (°F)

- (D) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (E) The Permittee shall use a monitoring device to monitor and record continuously the temperature during the testing and shall report the results to the Administrator with the performance test results.
- (F) If at a later date, the Permittee believes the emissions limits are being met even though the operating temperature of the afterburner is lower than that established during the performance test, then the Permittee may submit a written request to the Administrator to repeat the performance test.

[Note: Asphalt Materials, Inc. should have conducted performance tests of the afterburner used to control VOC emissions from the blowing still (unit ST-047) not later than 180 days after initial startup. Since the company failed to perform the testing, the proposed permit requires the performance test be completed within 180 days of the date on which the permit is issued. The source is required to comply with all other requirements of this NSPS immediately upon issuance of this proposed permit, since the source is already monitoring the

afterburner temperature and the additional record keeping requirements will not require any additional time to implement.]

This subpart also applies to storage tanks that are used to store asphalt at asphalt processing plants. The subpart applies to storage tanks constructed after November 18, 1980, which are used to store asphalt used for roofing only or roofing and other purposes. The subpart also applies to storage tanks constructed after May 26, 1981, which are used to store asphalt used only for nonroofing applications. Therefore, storage tanks ST-010, ST-011, ST-012, ST-014, ST-034, ST-036, ST-037, ST-039, ST-040, ST-050, ST-051, ST-052, ST-054, ST-055, ST-056, ST-057, and ST-175 are subject to this NSPS and are required to comply with the following limit:

Pursuant to the 40 CFR 60.472(c), no gases shall be discharged from any asphalt storage tank, subject to 40 CFR 60, Subpart UU, with an opacity greater than zero percent, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

Storage tanks ST-001, ST-002, ST-003, ST-004, ST-007, ST-009, ST-013, ST-015, ST-016, ST-017, ST-018, ST-019, ST-020, ST-023, ST-024, ST-025, ST-028, ST-029, ST-030, ST-031, ST-032, ST-033, ST-035, ST-038, ST-041, ST-043, ST-042, ST-045, ST-066, ST-067, ST-803, ST-560, and ST-260 are not subject to 40 CFR 60, Subpart UU, because these storage tanks were constructed prior to the applicability dates for roofing (November 18, 1980) and non-roofing (May 26, 1981) storage tanks.

This subpart does not apply to storage tanks used to store materials other than asphalt. Therefore, storage tanks ST-005, ST-006, ST-008, ST-021, ST-022, ST-044, ST-049, and ST-053 are not subject to this NSPS. In addition, this subpart does not apply to storage tanks used to store cutback asphalts and emulsified asphalts. Therefore, storage tanks ST-011, ST-039, and ST-040 are not subject to this NSPS.

- (6) This source is not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart I Standards of Performance for Hot Mix Asphalt Facilities (326 IAC 12) because it does not manufacture hot mix asphalt by heating and drying aggregate and mixing with asphalt cements. 40 CFR 60.90(a) defines a hot mix asphalt facility as "...comprised only of any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregates; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt..." None of this equipment or processes occur at this plant. This source operates a blowing still and prepares a variety of asphalt emulsion blends. The products are sold to sources that operate hot mix asphalt and asphalt roofing plants.
- (7) This source is not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants (326 IAC 12) because this plant does perform aggregate crushing, grinding, screening, conveying, or loading operations. No aggregate is used or stored at this plant.
- (8) Storage tanks ST-001, ST-002, ST-003, ST-004, ST-009, ST-013, ST-015, ST-016, ST-017, ST-018, ST-019, ST-020, ST-023, ST-024, ST-025, ST-028, ST-029, ST-030, ST-031, ST-032, ST-033, ST-035, ST-041, ST-066, ST-067, ST-803, ST-560, and ST-260 are not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart K Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction,

or Modification Commenced After June 11, 1973 and Prior to May 19, 1978 (326 IAC 12), because these storage tanks were constructed prior to the applicability date of June 11, 1973 and were not reconstructed or modified after June 11, 1973.

Although constructed between June 11, 1973 and May 19, 1978, storage tank ST-042 is not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart K - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978 (326 IAC 12), because this storage tank has a maximum storage capacity of 20,728 gallons, which is less than 40,000 gallons (151,412 liters) an applicability threshold. The storage tank is not subject to 40 CFR 60, Subparts Ka and Kb because it was constructed in 1975, which is before the May 18, 1978 and July 23, 1984 applicability dates for these NSPS.

(9) Storage tanks ST-007 and ST-038 are subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984 (326 IAC 12), because these storage tanks were constructed in 1980 and have maximum storage capacities greater than 40,000 gallons. Although these storage tanks are subject to this NSPS, there are no applicable requirements because the petroleum asphalt stored in these tanks has a true vapor pressure less than 1.5 psia.

Although constructed between May 18, 1978 and July 23, 1984, storage tanks ST-043, ST-044, and ST-045 are not subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984 (326 IAC 12), because these storage tanks have a storage capacity less than 40,000 gallons.

(10) Several of the storage tanks located at this source are subject to the New Source Performance Standard (NSPS), 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (326 IAC 12). Storage tanks ST-005, ST-006, ST-010, ST-011, ST-012, ST-014, ST-021, ST-022, ST-034, ST-036, ST-037, ST-039, ST-040, ST-050, ST-051, ST-054, ST-055, ST-056, ST-057, and ST-175 are subject to 40 CFR 60, Subpart Kb because these storage tanks each have maximum capacities greater than 40 cubic meters (10,567 gallons), are used to store volatile organic liquids, and were constructed after July 23, 1984.

Storage tanks ST-005, ST-006, ST-011, ST-021, ST-022, ST-036, ST-039, ST-040, ST-050, ST-051, ST-54, and ST-055 are exempt from the General Provisions (Part 60, Subpart A) and from the limits of this subpart because they each have a maximum capacity greater than 75 m³ (19,817 gallons) and less than 151 m³ (39,898 gallons), and are used to store liquids with a maximum true vapor pressure less than 15.0 KPa (2.16 psi). Although there are no limits applicable to this storage tank, the source must comply with the applicable record keeping requirements specified in 40 CFR 60.116b(a) and (b).

Storage tanks ST-010, ST-012, ST-014, ST-034, ST-037, ST-056, ST-057, and ST-175 are exempt from the General Provisions (Part 60, Subpart A) and from the limits of this subpart because they each have a maximum capacity greater

than 151 m³ (39,898 gallons) and are used to store liquids with a maximum true vapor pressure less than 3.5 KPa (0.50 psi). Although there are no limits applicable to this storage tank, the source must comply with the applicable record keeping requirements specified in 40 CFR 60.116b(a) and (b).

Although constructed after July 23, 1984, storage tanks ST-008, ST-049, ST-052, and ST-053 are not subject to 40 CFR 60, Subpart Kb because these tanks have maximum storage capacities less than 40 cubic meters (10,567 gallons).

- (11) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (12) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.
- (13) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because, although this source belongs to the source category *Asphalt Processing and Asphalt Roofing Manufacturing* that is affected by the Section 112(j) MACT Hammer date of May 15, 2002, this source is not a major source of HAPs (i.e., the source does not have the potential to emit 10 tons per year or greater of a single HAP or 25 tons per year or greater of a combination of HAPs.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not in one of the twenty-eight listed source categories. The source was constructed in 1959 and was an existing major source. The source has been modified several times since the PSD applicability date in 1977. In terms of emissions the most significant modifications occurred in 1994 and 1996. In 1994, the source installed boiler SB-02, which had potential emissions of sulfur dioxide that were greater than the 40 ton per year PSD threshold. However, the source was issued a construction permit (No. 930098-01, issued March 12, 1993) in which the sulfur dioxide emissions from the boiler were limited to 18.19 tons of SO_2 per year and 0.5 pounds per MMBtu. In addition to these emission limits, the construction permit also limited the number of hours the source could burn fuel oil No.2 in boiler SB-02 to 3,000 hours per year. Using the current AP-42 emission factors and a maximum sulfur content of 0.5% by weight, the 3,000 hour per year limit is equivalent to 18.45 tons of sulfur dioxide per year. Since the emissions from the boiler were limited by both of these conditions to less than the PSD thresholds, this boiler would not be subject to PSD review. The following limitations have been included in this proposed permit:

Pursuant to CP 930098-01, issued March 12, 1993 and revised by this permit, boiler SB-02 shall be limited to the following:

- (a) The number of gallons of fuel oil No.2 burned in boiler SB-02 shall not exceed 1,125,000 gallons per twelve (12) consecutive month* period with compliance determined at the end of each month.
- (b) The emissions of sulfur dioxide shall not exceed 0.5 lbs per MMBtu heat input.

These limits are equivalent to 39.9 tons of SO_2 per twelve (12) consecutive month period, which is less than the 40 tons per twelve (12) consecutive month period significance level for PSD applicability. Therefore, compliance with these limitations makes 326 IAC 2-2 not applicable to the boiler.

* The fuel throughput limit was calculated assuming the sulfur content of the oil is 0.5% by weight and the maximum sulfur dioxide emissions are limited to 40.0 tons per twelve (12) consecutive month period.

In 1996, the existing two blowing stills and their control devices were replaced by a new blowing still and control device (i.e., knock-out tank (ST-046) and afterburner (CE-02)). The emissions before controls of PM, PM $_{10}$ and VOC are greater than the PSD thresholds (25 tons per year for PM, 15 tons per year for PM $_{10}$, and 40 tons per year for VOC). However, the new blowing still was and still is subject to a PM emission limit of 0.3 tons per year (326 IAC 6-1-12). The source uses the afterburner to comply with this limitation. Since the PM emissions are comprised primarily of condensible PM $_{10}$ and VOC, the use of the afterburner to control PM emissions ensures that the emissions of PM $_{10}$ and VOC are less than the PSD thresholds (40 tons per year for VOC and 15 tons per year for PM $_{10}$). By complying with the FESOP requirements for the blowing still, the source will be in compliance with 326 IAC 2-2. The following limitations have been included in this proposed permit:

- (a) The PM and PM10 emissions from the asphalt blowing still shall not exceed 0.068 pounds per hour, which is equivalent to 0.3 tons per twelve (12) consecutive month period.
- (b) The VOC emissions from the asphalt blowing still shall not exceed 0.74 pounds per ton of asphalt processed. This limit is equivalent to 39 tons per twelve (12) consecutive month period at the maximum operating capacity of the blowing still of 12 tons per hour.

Compliance with these limitations makes 326 IAC 2-2 not applicable to the asphalt blowing still.

In addition to these modifications, several minor changes to the source have been made, including the installation of several small heaters, processing/mixing tanks, and storage tanks. These changes resulted emission increases that were less than the PSD significance thresholds and, therefore, were not subject to PSD review.

326 IAC 2-8 (FESOP)

The potential to emit PM_{10} , SO_2 , and VOC for the entire source that are greater than one hundred (100) tons per year. The source has voluntarily agreed to limit the emissions of these pollutants to less than 100 tons per twelve (12) consecutive month period. The following limitations have been included in the proposed permit:

- (a) The PM₁₀ and VOC emissions from the asphalt blowing still shall be controlled using the knock-out tanks and afterburner. The knock-out tank and afterburner shall be in operation and control emissions from the blowing still at all times the still is in operation. The following limitations have been included in the permit:
 - (1) The PM₁₀ emissions from the asphalt blowing still shall not exceed 0.068 pounds of PM₁₀ per hour. This limit is equivalent to 0.3 tons per twelve (12) consecutive month period. This limit, combined with the emissions from the boilers and heaters, results in PM₁₀ emissions from the entire source that are less than or equal to 4.9 tons per twelve (12) consecutive month period.
 - (2) The VOC emissions from the asphalt blowing still shall not exceed 0.017 pounds of VOC per ton of asphalt processed. This limited is equivalent to 0.89 tons per twelve (12) consecutive month period at the maximum capacity of the blowing still of 12 tons per hour. This limit, combined with the emissions from the boilers, heaters, and storage tanks, results in VOC emissions from the entire source that are less than or equal to 2.41 tons per twelve (12) consecutive month period.

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(b) The SO₂ emissions from the boilers and heaters shall be limited to less than 100 tons per twelve (12) consecutive month period by limiting the amount and sulfur content of the fuel oil burned by these units. The following limitation is included in the permit:

The amount of fuel oil No.2 burned in the boilers (SB-01, and SB-02) and the heaters (PH01, HO-01, HO-02, HO-03, HO-04, HO-05, HO-06, HO-07, TH-34, TH-37, TH-42, and TH-43) shall not exceed 2,802,817 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. The sulfur content of the fuel oil shall not exceed 0.5% by weight. These limits are equivalent to 99.5 tons of SO_2 per twelve (12) consecutive month period.

The fuel usage limit was calculated as follows:

Allowing 0.5 tons per year for SO_2 emissions from natural gas combustion in the boilers, heaters, and afterburner, the source will be limited to 99.5 tons of SO_2 per twelve (12) consecutive month period for the combustion of fuel oil. The emission factor for SO_2 emissions form burning fuel oil No.2 is 142.0 multiplied by the % by weight of sulfur in the oil. Since the sulfur content of the fuel oil will be limited to 0.5% by weight, the emission factor is 71 lbs SO_2 per 1,000 gallons of oil burned.

Fuel Usage limit (gallons/yr) = (99.5 tons/year)(1,000 gallons/71 lbs)(2000 lb/ton)

= 2,802,817 gallons per year.

Compliance with these limits makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This source was constructed prior to the July 27, 1997 applicability date. Although construction activities were undertaken at the source after July 27, 1997, none of these activities have resulted in emissions greater than 10 tons per year for a single HAP or greater than 25 tons per year for combined HAPs. Therefore, this source is not subject to the requirements of 326 IAC 2-4.1.

326 IAC 7-4-2 (Marion County Sulfur Dioxide Emissions)

Although this source is located in Marion County, it is not subject to 326 IAC 7-4-2 because it is not one of the sources listed under this rule.

326 IAC 6-1-2(c) (Particulate Matter Limit for Asphalt Concrete Plants)

This source is not subject to the requirements of 326 IAC 6-1-2(c) because it does not operate an asphalt concrete plant. The plant does not perform aggregate handling operations, such as unloading, screening, drying, storing, weighing, and conveying, and does not mix asphalt with aggregate to make asphalt paving. 326 IAC 6-1-2(a) and (b) are applicable to certain specific emission units as described below.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources located in Marion County, which existed as of January 1, 1980, with potential solvent VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. Since the potential VOC emissions are less than 100 tons per year, this source is not subject to 326 IAC 8-6.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC

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2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

State Rule Applicability - Asphalt Blowing Still (ST-047)

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations)

The asphalt blowing still is not subject to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations) because this unit is subject to the particulate matter limit in 326 IAC 6-1-12.

326 IAC 6-1-12 (Marion County)

Pursuant to 326 IAC 6-1-12, the particulate matter emissions from the asphalt blowing still (ST-047) shall be limited to 0.004 grains per dry standard cubic foot (0.3 tons per year).

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The asphalt blowing still, constructed in 1996, is subject to the requirements of 326 IAC 8-1-6 because it has a potential to emit VOC that is greater than 25 tons per year, it was constructed after January 1, 1980, and is not subject to any other provisions of 326 IAC 8. Pursuant to this rule, the source is required to use Best Available Control Technology (BACT) to reduce the VOC emissions. Although a formal BACT review was not undertaken at the time of construction, the source installed a knock-out tank and afterburner to control PM, PM_{10} and VOC emissions. It was determined that the afterburner represents the presumptive BACT for asphalt blowing stills. The afterburner was installed at the same time the new blowing still was constructed, therefore, the source is considered to be in compliance with this rule. The proposed permit includes a condition requiring the control equipment be used at all times the blowing still is in operation and a condition detailing the operating and monitoring requirements necessary to ensure correct operation of the afterburner.

State Rule Applicability - Boiler SB-01

326 IAC 6-1-2(b) (Particulate Matter Limitation (PM))

Boiler SB-01 is subject to 326 IAC 6-1-2(b), because the actual emissions from the source are greater than ten (10) tons per year and the boiler is not listed in 326 IAC 6-1-12. The following conditions have been included in the proposed permit:

- (a) Pursuant to 326 IAC 6-1-2(b)(4)(Nonattainment Area Limitations), the particulate matter emissions from the 6.7 MMBtu per hour boiler (SB-01) shall be limited to 0.15 pounds per million Btu, when burning fuel oil.
- (b) Pursuant to 326 IAC 6-1-2(b)(5) (Nonattainment Area Limitations), the particulate matter content of natural gas burned in the 6.7 MMBtu per hour boiler (SB-01) shall be limited to 0.01 grains per dry standard cubic foot of natural gas.

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326 IAC 7-1.1-1(Sulfur Dioxide Emissions)

Boiler SB-01 326 is not subject to IAC 7-1.1 (SO₂ Emissions Limitations) because it has a potential to emit sulfur dioxide that is less than twenty-five (25) tons per year.

State Rule Applicability - Boiler SB-02

326 IAC 6-1-2(b) (Particulate Matter Limitation (PM))

Boiler SB-02 is subject to 326 IAC 6-1-2(b), because the actual emissions from the source are greater than ten (10) tons per year, and the boiler is not listed in 326 IAC 6-1-12. The following conditions have been included in the proposed permit:

- (a) Pursuant to 326 IAC 6-1-2(b)(4)(Nonattainment Area Limitations), the particulate matter emissions from the 24.25 MMBtu per hour boiler (SB-02) shall be limited to 0.15 pounds per million Btu, when burning fuel oil.
- (b) Pursuant to 326 IAC 6-1-2(b)(5) (Nonattainment Area Limitations), the particulate matter content of natural gas burned in the 24.25 MMBtu per hour boiler (SB-02) shall be limited to 0.01 grains per dry standard cubic foot of natural gas.

326 IAC 7-1.1-2 (Sulfur Dioxide (SO₂) Emission Limitations)

The potential to emit sulfur dioxide from the 24.25 MMBtu per hour boiler (SB-02) is greater than 25 tons per twelve (12) consecutive month period. Therefore, 326 IAC 7-1.1-2 is applicable to this boiler. Pursuant to 326 IAC 7-1.1-2, the SO_2 emissions from boiler SB-02 shall not exceed five tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements), the source shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emissions rate (in pounds of SO_2 per MMBtu) to IDEM, OAQ upon request.

State Rule Applicability - Heaters PH-01, HO-01, HO-02, HO-03, HO-04, HO-05, HO-06, HO-07, TH-34, TH-37, TH-42, and TH-043

326 IAC 7-1.1-2 (Sulfur Dioxide (SO₂) Emission Limitations)

The potential to emit sulfur dioxide from the 11.6 MMBtu per hour asphalt heater (PH-01) is greater than 25 tons per year. Therefore, 326 IAC 7-1.1-2 is applicable to this heater. Pursuant to 326 IAC 7-1.1-2, the SO_2 emissions from the asphalt heater PH-01 shall not exceed five tenths (0.5) pounds per MMBtu heat input.

326 IAC 7-1.1 (SO₂ Emissions Limitations) is not applicable to the other heaters located at this source because each has a potential to emit sulfur dioxide that is less than twenty-five (25) tons per year.

326 IAC 6-1-2(b) (Particulate Matter Limitation)

The heaters are not subject to the requirements of 326 IAC 6-1-2(b) because this rule applies only to steam generators.

326 IAC 6-1-2(a) (Particulate Matter Limitations (PM))

The heaters are subject to 326 IAC 6-1-2(a), because the actual emissions from the source are greater than ten (10) tons per year and the heaters are not listed in 326 IAC 6-1-12. The following condition has been added to the permit:

Pursuant to 326 IAC 6-1-2(a) (Nonattainment Area Limitations), the particulate matter emissions from the heaters shall be limited to 0.03 grains per dry standard cubic foot (dscf), when firing on fuel oil.

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State Rule Applicability - Storage Tanks

326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

The storage tanks located at this source are not subject to the provisions of 326 IAC 8-9 because this rule applies only to storage tanks that are located in Clark, Floyd, Lake, or Porter County.

326 IAC 8-4 (Petroleum Liquid Storage Facilities)

The storage tanks located at this source are not subject to the provisions of 326 IAC 8-4 because the true vapor pressure of the stored liquids are all less than 10.5 kPa (1.52 psi).

State Rule Applicability - Asphalt Processing Units, including Mills, Blending/Mixing Tanks

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

Although the batch mixing tank identified as ST-048 and the multigrade asphalt mill were constructed after January 1, 1980, the potential to emit VOC from these units is less than 25 tons per twelve (12) consecutive month period. Therefore, these emission units are not subject to the provisions of 326 IAC 8-1-6. The asphalt emulsion mill and blending tanks ST-026 and ST-027 were constructed before the applicability date of this rule and are not subject to this rule.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This rule applies to sources located in Marion County, which existed as of January 1, 1980, with potential solvent VOC emissions of 100 tons per year or more, and not regulated by any other provision of Article 8. Batch mixing table ST-048 and the multigrade asphalt mill were constructed after January 1, 1980 and are, therefore, not subject to 326 IAC 8-6. Although constructed prior to January 1, 1980, the asphalt emulsion mill and blending tanks ST-026 and ST-027 are not subject to the requirements of 326 IAC 8-6 because the potential VOC emissions are limited to less than 100 tons per year.

326 IAC 6-1-2 (Particulate Matter Limitation)

The asphalt processing units are not subject to 326 IAC 6-1-2 because they do not emit particulate matter.

State Rule Applicability - Paved and Unpaved Roads and Parking Lots

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The paved and unpaved roads and parking lots are subject to the provisions of 326 IAC 6-5 because the potential to fugitive particulate matter is greater than 25 tons per twelve (12) consecutive month period and the source is located in Marion County. Pursuant to 326 IAC 6-5, fugitive particulate matter emissions shall be controlled according the following plan:

The fugitive particulate matter emissions from plant roadways and parking lots shall be controlled by:

- (a) Applying a dust suppressant, such as water or an asphalt emulsion, to road and parking lot surfaces when needed.
- (b) The dust suppressant will be sprayed on roadway surfaces on an as-needed basis, contingent upon precipitation events and humidity.
- (c) Vehicle traffic speeds on unpaved roadways will be limited to 10 miles per hour.

Testing Requirements

This source will be required to perform the PM, PM10 and VOC stack testing on the exhaust gases from the afterburner used to control emissions from the asphalt blowing still within 180 days after issuance of this permit. Testing shall be performed using methods approved by the

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Asphalt Materials, Inc. Indianapolis, Indiana Permit Reviewer: ERG/AAB

IDEM Commissioner and the OES Administrator. PM10 includes filterable and condensible PM10.

The PM stack test is required to demonstrate compliance with NSPS 40 CFR 60, Subpart UU. The PM₁₀ and VOC stack tests are required to demonstrate compliance with the FESOP limits.

No stack tests are required to demonstrate compliance with the sulfur dioxide limit because the source is required to maintain records of the fuel oil usage and sulfur content of the fuel oil burned in the boilers and heaters. Together with AP-42 emission factors, these records can be used to determine compliance with this limit.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- The asphalt blowing still has applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the asphalt blowing still stack exhaust shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
 - (b) The afterburner (CE-01) shall operate at all times that the process is in operation. When operating, the afterburner shall maintain a minimum operating temperature of 1300 °F during operation until a temperature has been determined from the most recent compliant stack test, as approved by IDEM. Pursuant to 40 CFR 60.473(b), a continuous monitoring system shall be calibrated, maintained, and operated on the afterburner for measuring operating temperature in the combustion zone. The output of this system shall be

recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The monitoring instrument shall have an accuracy of ± 10 °C (± 18 °F).

These monitoring conditions are necessary because the afterburner must operate properly to ensure compliance with 40 CFR 60, Subpart UU (326 IAC 12) 326 IAC 6-1, 326 IAC 8-1-6, and 326 IAC 2-8.

2. Boiler SB-02 has applicable compliance monitoring conditions as specified below:

Visible emission notations of the boiler SB-02 stack exhaust shall be performed once per shift during normal daylight operations when burning fuel oil. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the boiler must operate properly to ensure compliance with 326 IAC 6-1 and 326 IAC 2-8.

- 3. There are no applicable compliance monitoring conditions for boiler SB-01 because there is no control device for this unit and the actual PM, VOC, and SO₂ emissions are less than 25 tons per twelve (12) consecutive month period.
- 4. There are no applicable compliance monitoring conditions for the heaters because there are no control devices for these units and the actual PM, VOC, and SO₂ emissions are less than 25 tons per twelve (12) consecutive month period.
- 5. There are no applicable compliance monitoring conditions for the storage and processing tanks because there are no control devices for these tanks and the actual PM, VOC, and SO_2 emissions are less than 25 tons per twelve (12) consecutive month period.

Conclusion

The operation of this asphalt emulsion blending and asphalt oxidation plant shall be subject to the conditions of the attached proposed (FESOP No.: F097-6035-00098).

Appendix A: Emission Calculations 6.7 MMBtu/hour Boiler (SB-01) Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
Plt ID: 097-00098
Reviewer: ERG/AAB
Date: 15-Oct-02

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

6.7 58.7

Pollutant

| | PM* | PM10* | SO2 | NOx | VOC | CO |
|-------------------------------|-----|-------|-------|-------------|-----|------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.2 | 0.2 | 0.018 | 2.9 | 0.2 | 2.5 |

^{*}PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) \times 8,760 hrs/yr \times 1 MMCF/1,000 MMBtu Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Appendix A: Emission Calculations 6.7 MMBtu/hour Boiler (SB-01) Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 15-Oct-02

HAPs - Organics

| Emission Factor in lb/MMCF | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 6.163E-05 | 3.522E-05 | 2.201E-03 | 5.282E-02 | 9.978E-05 |

HAPs - Metals

| Emission Factor in lb/MMCF | Lead | Cadmuim | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 1.467E-05 | 3.228E-05 | 4.108E-05 | 1.115E-05 | 6.163E-05 |

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations 6.7 MMBtu/hour Boiler (SB-01) #2 Fuel Oil Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB

Date: 15-Oct-02

Heat Input Capacity
MMBtu/hr

Potential Throughput

S = Weight % Sulfur

kgals/year

0.5

6.7

419.2

| | Pollutant | | | | | |
|-------------------------------|-----------|-----------|------|------|-----|--|
| | PM* | SO2 | NOx | VOC | CO | |
| Emission Factor in lb/kgal | 3.3 | 71 | 20.0 | 0.34 | 5.0 | |
| | | (142.0 S) | | | | |
| Potential Emission in tons/yr | 0.7 | 14.9 | 4.2 | 0.1 | 1.0 | |

^{*}PM emission factor is for filterable and condensible PM.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file) Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

correct factor is used (i.e., condensable included/not included).

Appendix A: Emission Calculations 6.7 MMBtu/hour Boiler (SB-01) #2 Fuel Oil Combustion HAPs Emisssions

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 15-Oct-02

HAPs - Metals

| Emission Factor in lb/MMBtu | Arsenic | Beryllium | Cadmium | Chromium | Lead |
|-------------------------------|----------|-----------|----------|----------|----------|
| | 4.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 9.0E-06 |
| Potential Emission in tons/yr | 1.17E-04 | 8.80E-05 | 8.80E-05 | 8.80E-05 | 2.64E-04 |

HAPs - Metals (continued)

| Emission Factor in lb/MMBtu | Mercury | Mangamese | Nickel | Selenium |
|-------------------------------|----------|-----------|----------|----------|
| | 3.0E-06 | 6.0E-06 | 3.0E-06 | 1.5E-05 |
| Potential Emission in tons/yr | 8.80E-05 | 1.76E-04 | 8.80E-05 | 4.40E-04 |

Methodology

No data was available in AP-42 for organic HAPs.

 $Potential\ Emissions\ (tons/year) = Throughput\ (MMBtu/hr)*Emission\ Factor\ (lb/MMBtu)*8,760hrs/yr\ /\ 2,000lb/ton$

Appendix A: Emission Calculations 24.25 MMBtu/hour Boiler (SB-02) Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB

Date: 15-Oct-02

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

24.3 212.4

Pollutant

| | PM* | PM10* | SO2 | NO_x | VOC | CO |
|-------------------------------|-----|-------|-------|-------------|-----|------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.8 | 0.8 | 0.064 | 10.6 | 0.6 | 8.9 |

^{*}PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

^{**}Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Appendix A: Emission Calculations 24.25 MMBtu/hour Boiler (SB-01) Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 15-Oct-02

HAPs - Organics

| Emission Factor in lb/MMCF | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 2.231E-04 | 1.275E-04 | 7.966E-03 | 1.912E-01 | 3.611E-04 |

HAPs - Metals

| Emission Factor in lb/MMCF | Lead | Cadmuim | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 5.311E-05 | 1.168E-04 | 1.487E-04 | 4.036E-05 | 2.231E-04 |

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations 24.25 MMBtu/hour Boiler (SB-02) #2 Fuel Oil Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
Plt ID: 097-00098
Reviewer: ERG/AAB
Date: 15-Oct-02

Heat Input Capacity
MMBtu/hr

Potential Throughput kgals/year

S = Weight % Sulfur 0.5

24.3

1517.4

| | Pollutant | | | | | |
|-------------------------------|-----------|-----------|------|------|-----|--|
| | PM* | SO2 | NOx | VOC | CO | |
| Emission Factor in lb/kgal | 3.3 | 71 | 20.0 | 0.34 | 5.0 | |
| | | (142.0 S) | | | | |
| Potential Emission in tons/yr | 2.5 | 53.9 | 15.2 | 0.3 | 3.8 | |

^{*}PM emission factor is for filterable and condensible PM.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file) Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emission Calculations 24.25 MMBtu/hr Boiler (SB-02) #2 Fuel Oil Combustion HAPs Emissions

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 15-Oct-02

HAPs - Metals

| Emission Factor in lb/MMBtu | Arsenic | Beryllium | Cadmium | Chromium | Lead |
|-------------------------------|----------|-----------|----------|----------|----------|
| | 4.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 9.0E-06 |
| Potential Emission in tons/yr | 4.25E-04 | 3.19E-04 | 3.19E-04 | 3.19E-04 | 9.56E-04 |

HAPs - Metals (continued)

| Emission Factor in lb/MMBtu | Mercury | Mangamese | Nickel | Selenium |
|-------------------------------|----------|-----------|----------|----------|
| | 3.0E-06 | 6.0E-06 | 3.0E-06 | 1.5E-05 |
| Potential Emission in tons/yr | 3.19E-04 | 6.37E-04 | 3.19E-04 | 1.59E-03 |

Methodology

No data was available in AP-42 for organic HAPs.

 $Potential\ Emissions\ (tons/year) = Throughput\ (MMBtu/hr)*Emission\ Factor\ (lb/MMBtu)*8,760hrs/yr\ /\ 2,000lb/ton$

Appendix A: Emission Calculations 11.6 MMBtu/hourAsphalt Heater (PH-01) **Natural Gas Combustion**

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 PIt ID: 097-00098 Reviewer: ERG/AAB

Date: 15-Oct-02

Heat Input Capacity MMBtu/hr

Potential Throughput MMCF/yr

11.6 101.6

Pollutant

| | PM* | PM10* | SO2 | NO _x | VOC | CO |
|-------------------------------|-----|-------|-------|-----------------|-----|------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.4 | 0.4 | 0.030 | 5.1 | 0.3 | 4.3 |

^{*}PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

Methodology

All Emission factors are based on normal firing. MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

^{**}Emission Factors for NO_v: Uncontrolled = 100, Low NO_v Burner = 50, Low NO_v Burners/Flue gas recirculation = 32

Appendix A: Emission Calculations 11.6 MMBtu/hour Asphalt Heater (PH-01)

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Natural Gas Combustion

Company Name: Asphalt Materials, Inc.
Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
PIt ID: 097-00098
Reviewer: ERG/AAB
Date: 15-Oct-02

HAPs - Organics

| Emission Factor in lb/MMCF | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 1.067E-04 | 6.097E-05 | 3.811E-03 | 9.145E-02 | 1.727E-04 |

HAPs - Metals

| Emission Factor in lb/MMCF | Lead | Cadmuim | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 2.540E-05 | 5.589E-05 | 7.113E-05 | 1.931E-05 | 1.067E-04 |

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations 11.6 MMBtu/hour Asphalt Heater (PH-01) #2 Fuel Oil Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
Plt ID: 097-00098
Reviewer: ERG/AAB
Date: 15-Oct-02

Heat Input Capacity Pot

Potential Throughput S = Weight % Sulfur

kgals/year

0.5

11.6

MMBtu/hr

725.8

| | Pollutant | | | | | |
|-------------------------------|-----------|-----------|------|------|-----|--|
| | PM* | SO2 | NOx | VOC | CO | |
| Emission Factor in lb/kgal | 3.3 | 71 | 20.0 | 0.34 | 5.0 | |
| | | (142.0 S) | | | | |
| Potential Emission in tons/yr | 1.2 | 25.8 | 7.3 | 0.1 | 1.8 | |

^{*}PM emission factor is for filterable and condensible PM.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file) Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

that the correct factor is used (i.e., condensable included/not included).

Appendix A: Emission Calculations 11.6 MMBtu/hour Asphalt Heater (PH-01) # 2 Fuel Oil Combustion HAPs Emissions

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 15-Oct-02

HAPs - Metals

| Emission Factor in lb/MMBtu | Arsenic | Beryllium | Cadmium | Chromium | Lead |
|-------------------------------|----------|-----------|----------|----------|----------|
| | 4.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 9.0E-06 |
| Potential Emission in tons/yr | 2.03E-04 | 1.52E-04 | 1.52E-04 | 1.52E-04 | 4.57E-04 |

HAPs - Metals (continued)

| The continuous | | | | | | | | |
|-------------------------------|--------------------|----------------------|-------------------|---------------------|--|--|--|--|
| Emission Factor in lb/MMBtu | Mercury 3.0E-06 | Mangamese 6.0E-06 | Nickel 3.0E-06 | Selenium 1.5E-05 | | | | |
| | | | | | | | | |
| Potential Emission in tons/yr | 1.52E-04 | 3.05E-04 | 1.52E-04 | 7.62E-04 | | | | |

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (MMBtu/hr)*Emission Factor (lb/MMBtu)*8,760hrs/yr / 2,000lb/ton

Appendix A: Emission Calculations Seven Oil Heaters (HO-01 through HO-07) Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
PIt ID: 097-00098
Reviewer: ERG/AAB
Date: 16-Oct-02

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

30.98 271.4

(Includes one 3.5MMBtu/hr, one 2.0MMBtu/hr, two 3.54MMBtu/hr, one 10.0MMBtu/hr, and two 4.2MMBtu/hr oil heaters)

Pollutant

| | PM* | PM10* | SO2 | NO _x | VOC | CO |
|-------------------------------|-----|-------|-------|-----------------|-----|------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 1.0 | 1.0 | 0.081 | 13.6 | 0.7 | 11.4 |

^{*}PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

^{**}Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Appendix A: Emission Calculations Seven Oil Heaters (HO-01 through HO-07)

Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 16-Oct-02

HAPs - Organics

| Emission Factor in lb/MMCF | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 2.850E-04 | 1.628E-04 | 1.018E-02 | 2.442E-01 | 4.614E-04 |

HAPs - Metals

| Emission Factor in lb/MMCF | Lead 5.0E-04 | Cadmuim 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Potential Emission in tons/yr | 6.785E-05 | 1.493E-04 | 1.900E-04 | 5.156E-05 | 2.850E-04 |

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations Seven Oil Heaters (HO-01 through HO-07) #2 Fuel Oil Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

0.5

CP: F097-6035 PIt ID: 097-00098 Reviewer: ERG/AAB

Date: 15-Oct-02

Heat Input Capacity Potential Throughput S = Weight % Sulfur MMBtu/hr kgals/year

30.98 1938.5

(Includes one 3.5MMBtu/hr, one 2.0MMBtu/hr, two 3.54MMBtu/hr, one 10.0MMBtu/hr, and two 4.2MMBtu/hr oil heaters)

| 1 , , , | | , | | | | |
|-------------------------------|-----------|-----------|------|------|-----|--|
| | Pollutant | | | | | |
| | PM* | SO2 | NOx | VOC | CO | |
| Emission Factor in lb/kgal | 3.3 | 71 | 20.0 | 0.34 | 5.0 | |
| | | (142.0 S) | | | | |
| Potential Emission in tons/yr | 3.2 | 68.8 | 19.4 | 0.3 | 4.8 | |

^{*}PM emission factor is for filterable and condensible PM.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file) Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emission Calculations Seven Oil Heaters (HO-01 through HO-07 #2 Fuel Oil Combustion

HAPs Emissions

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
Plt ID: 097-00098
Reviewer: ERG/AAB
Date: 15-Oct-02

HAPs - Metals

| Emission Factor in lb/MMBtu | Arsenic 4.0E-06 | Beryllium 3.0E-06 | Cadmium 3.0E-06 | Chromium 3.0E-06 | Lead 9.0E-06 |
|-------------------------------|--------------------|----------------------|--------------------|---------------------|-----------------|
| Potential Emission in tons/yr | 5.43E-04 | 4.07E-04 | 4.07E-04 | 4.07E-04 | 1.22E-03 |

HAPs - Metals (continued)

| Emission Factor in lb/MMBtu | Mercury | Mangamese | Nickel | Selenium |
|-------------------------------|----------|-----------|----------|----------|
| | 3.0E-06 | 6.0E-06 | 3.0E-06 | 1.5E-05 |
| Potential Emission in tons/yr | 4.07E-04 | 8.14E-04 | 4.07E-04 | 2.04E-03 |

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (MMBtu/hr)*Emission Factor (lb/MMBtu)*8,760hrs/yr / 2,000lb/ton

Appendix A: Emission Calculations Four Tank Tube Heaters (TH-34, TH-37, TH-42, and TH-43) Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
PIt ID: 097-00098
Reviewer: ERG/AAB
Date: 16-Oct-02

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

6.62 58.0

(Includes one 0.5MMBtu/hr, two 2.5MMBtu/hr, and one 1.12MMBtu/hr tank tube heaters)

Pollutant

| | PM* | PM10* | SO2 | NO _x | VOC | CO |
|-------------------------------|-----|-------|-------|-----------------|-----|------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.2 | 0.2 | 0.017 | 2.9 | 0.2 | 2.4 |

^{*}PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

^{**}Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Appendix A: Emission Calculations

Four Tank Tube Heaters (TH-34, TH-37, TH-42, and TH-43)

Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098

Reviewer: ERG/AAB
Date: 16-Oct-02

| HAPs - Organics | | | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|--|--|
| Emission Factor in lb/MMCF | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 | | |
| Potential Emission in tons/yr | 6.089E-05 | 3.479E-05 | 2.175E-03 | 5.219E-02 | 9.859E-05 | | |

HAPs - Metals

| Emission Factor in lb/MMCF | Lead | Cadmuim | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 1.450E-05 | 3.190E-05 | 4.059E-05 | 1.102E-05 | 6.089E-05 |

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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Appendix A: Emission Calculations Four Tank Tube Heaters (TH-34, TH-37, TH-42, and TH-43) #2 Fuel Oil Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 15-Oct-02

Heat Input Capacity

MMBtu/hr

Potential Throughput

kgals/year

S = Weight % Sulfur

0.5

6.62 414.2

(Includes one 0.5MMBtu/hr, two 2.5MMBtu/hr, and one 1.12MMBtu/hr tank tube heaters)

| | Pollutant | | | | | |
|-------------------------------|-----------|-----------|------|------|-----|--|
| | PM* | SO2 | NOx | VOC | CO | |
| Emission Factor in lb/kgal | 3.3 | 71 | 20.0 | 0.34 | 5.0 | |
| | | (142.0 S) | | | | |
| Potential Emission in tons/yr | 0.7 | 14.7 | 4.1 | 0.1 | 1.0 | |

^{*}PM emission factor is for filterable and condensible PM.

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.140 MMBtu

Emission Factors are from AP-42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see errata file) Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emission Calculations Four Tank Tube Heaters (TH-34, TH-37, TH-42, and TH-43) #2 Fuel Oil Combustion HAPs Emissions

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
PIt ID: 097-00098
Reviewer: ERG/AAB
Date: 15-Oct-02

HAPs - Metals

| Emission Factor in lb/MMBtu | Arsenic | Beryllium | Cadmium | Chromium | Lead |
|-------------------------------|----------|-----------|----------|----------|----------|
| | 4.0E-06 | 3.0E-06 | 3.0E-06 | 3.0E-06 | 9.0E-06 |
| Potential Emission in tons/yr | 1.16E-04 | 8.70E-05 | 8.70E-05 | 8.70E-05 | 2.61E-04 |

HAPs - Metals (continued)

| Emission Factor in lb/MMBtu | Mercury | Mangamese | Nickel | Selenium |
|-------------------------------|----------|-----------|----------|----------|
| | 3.0E-06 | 6.0E-06 | 3.0E-06 | 1.5E-05 |
| Potential Emission in tons/yr | 8.70E-05 | 1.74E-04 | 8.70E-05 | 4.35E-04 |

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (MMBtu/hr)*Emission Factor (lb/MMBtu)*8,760hrs/yr / 2,000lb/ton

Appendix A: Emission Calculations Emissions From Asphalt Oxidizer Blow Still (ST-047)

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
PIt ID: 097-00098
Reviewer: ERG/AAB
Date: 17-Oct-02

| Potential Throughput | 12.0 tons/hour |
|-----------------------|-------------------|
| r stormar rimougriput | 105,120 tons/year |

| PTE Before Controls | Pollutant | | | | | |
|-------------------------------|-----------|-------|-----|--------|--|--|
| | PM | PM10 | VOC | POM | | |
| Emission Factor in lb/ton | 24 | 24 | 3.4 | 0.0072 | | |
| PTE Before Controls (tons/yr) | 1,261 | 1,261 | 179 | 0.38 | | |

| PTE After Controls | Pollutant | | | | | |
|------------------------------|-----------|-------|-------|----------|--|--|
| | PM | PM10 | VOC | POM | | |
| | | | | | | |
| Emission Factor in lb/ton* | 0.81 | 0.81 | 0.017 | 2.43E-04 | | |
| PTE After Controls (tons/yr) | 42.57 | 42.57 | 0.89 | 0.01 | | |

^{*} Emissions controlled using an afterburner.

POM = Polycyclic organic matter.

Methodology:

Emissions Factors for PM are from AP-42 (5th Edition 1/95) Table 11.2-2 (SCC 3-05-001-02)

Emissions of PM10 are assumed equal to PM emissions

Emission Factors for TOC are from AP-42 (5th Edition 1/95) Table 11.2-4 (SCC 3-05-001-02)

Emissions of VOC are assumed to be equal to TOC.

Emissions of POM are 0.03% of PM Emissions (see footnote (a) Table 11.2-2)

PTE (tons/yr) = EF(lb/ton of Asphalt) * Throughput (tons/yr) * (1ton/2000lbs)

Appendix A: Emission Calculations 0.75 MMBtu/hr Afterburner for Asphalt Blowing Still Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB

Date: 16-Oct-02

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

7.50 65.7

Pollutant

| | PM* | PM10* | SO2 | NO _x | VOC | CO |
|-------------------------------|-------|-------|-------|-----------------|-------|-------|
| Emission Factor in lb/MMCF | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.250 | 0.250 | 0.020 | 3.285 | 0.181 | 2.759 |

^{*}PM and PM10 emission factor are for condensable and filterable PM and PM10 combined.

Methodology

All Emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

^{**}Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Appendix A: Emission Calculations 0.75 MMBtu/hr Afterburner for Asphalt Blowing Still Natural Gas Combustion

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 16-Oct-02

HAPs - Organics

| Emission Factor in lb/MMCF | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
|-------------------------------|-----------|-----------------|--------------|-----------|-----------|
| | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 6.899E-05 | 3.942E-05 | 2.464E-03 | 5.913E-02 | 1.117E-04 |

HAPs - Metals

| Emission Factor in lb/MMCF | Lead | Cadmuim | Chromium | Manganese | Nickel |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 1.643E-05 | 3.614E-05 | 4.599E-05 | 1.248E-05 | 6.899E-05 |

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations VOC Emissions From Storage Tanks

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035 Plt ID: 097-00098 Reviewer: ERG/AAB Date: 16-Oct-02

| | | | | | | | | Vapor | | | |
|------------------|----------------------------|--------------|------------------|---------------|----------|-------------|----------------------|--------------------|--------------|--------------------|--------------|
| | | | | | | | Vapor | Pressure | | | |
| | | | | | | | Pressure | Used in | l | | |
| | | Construction | Capacity | Tank | Tank | Temperature | Provided by | Tanks 4.0 | | VOC PTE | |
| Tank I.D. | Material Stored | Date | (gallons) | Diameter (ft) | | (deg. C) | Source (psi) | (psi) | (lbs/yr) | (tons/yr) | Controls |
| ST-001 | Asphalt* | 1959 | 210,990 | 33.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 6.87 | 3.4E-03 | None |
| ST-002 | Asphalt* | 1959 | 210,990 | 33.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 6.87 | 3.4E-03 | None |
| ST-003 | Asphalt* | 1959 | 210,990 | 33.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 6.87 | 3.4E-03 | None |
| ST-004 | Asphalt* | 1959 | 210,990 | 33.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 6.87 | 3.4E-03 | None |
| ST-005 | Tall Oil* | 2001 | 30,104 | 12 | 35.5 | 38 | 1.92E-06 | 4.5E-05 | 0.03 | 1.5E-05 | None |
| ST-006 | Tall Oil* | 2001 | 30,104 | 12 | 35.5 | 38 | 1.92E-06 | 4.5E-05 | 0.03 | 1.5E-05 | None |
| ST-007 | Asphalt* | 1980 | 215,913 | 35 | 30 | 150 | 1.90E-09 | 2.0E-04 | 7.00 | 3.5E-03 | None |
| ST-008 | Tall Oil* | 1990 | 8,300 | 10.5 | 13 | 38 | 1.92E-06 | 4.5E-05 | 0.01 | 5.0E-06 | None |
| ST-009 | Asphalt* Asphalt* | 1959 1998 | 64,173 42,302 | 21.25 | 24 32 | 150 82 | 1.90E-09 | 2.0E-04 | 0.51 | 2.6E-04 | None |
| ST-010 ST-011 | Asphalt* | 1998 | 30,104 | 15 12 | 35.5 | 82 | 1.90E-09 1.90E-09 | 2.0E-04 2.0E-04 | 0.11 0.08 | 5.5E-05 4.0E-05 | None None |
| ST-011 | Asphalt* | 1959 | 64,173 | 21.25 | 24 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.08 | 2.6E-04 | None |
| ST-012 | Asphalt* | 1959 | 64,173 | 21.25 | 24 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.51 | 2.6E-04 | None |
| ST-013 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.33 | 1.7E-04 | None |
| ST-014 ST-015 | Asphalt* | 2002 | 30,104 | 12 | 35.5 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.08 | 4.0E-05 | None |
| ST-015 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.08 | 1.7E-04 | None |
| ST-010 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.33 | 1.7E-04 1.7E-04 | None |
| ST-017 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.33 | 1.7E-04 1.7E-04 | None |
| ST-019 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 2.0E-04 | 0.33 | 1.7E-04 1.7E-04 | None |
| ST-019 | Tall Oil* | 1959 | 20,368 | 10 | 34.7 | 38 | 1.92E-06 | 3.8E-05 | 0.06 | 3.0E-05 | None |
| ST-020 | Aqueous Solution | 2000 | 30,104 | 12 | 35.5 | 25 | Negligible | Negligible | 0.00 | 0.0E+00 | None |
| ST-022 | Distillate Fuel Oil (No.2) | 1988 | 20,080 | 10.5 | 31 | 25 | 6.2E-03 | 6.2E-03 | 13.39 | 6.7E-03 | None |
| ST-023 | Asphalt* | 1959 | 20,728 | 10.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 0.12 | 6.0E-05 | None |
| ST-024 | Asphalt* | 1959 | 22,995 | 10.5 | 34.7 | 150 | 1.90E-09 | 2.0E-04 | 0.14 | 7.0E-05 | None |
| ST-025 | Asphalt* | 1968 | 424,484 | 42.5 | 40 | 150 | 1.90E-09 | 2.0E-04 | 1.72 | 8.6E-04 | None |
| ST-028 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 | 0.33 | 1.7E-04 | None |
| ST-029 | Asphalt* | 1959 | 21,151 | 15 | 16 | 82 | 1.90E-09 | 2.0E-04 | 0.33 | 1.7E-04 | None |
| ST-030 | Sodium Hydroxide | 1959 | 15,222 | 10.5 | 23.5 | 25 | Negligible | Negligible | 0.00 | 0.0E+00 | None |
| ST-031 | Distillate Fuel Oil (No.2) | 1959 | 15,222 | 10.5 | 23.5 | 25 | 5.9E-03 | 5.9E-03 | 10.22 | 5.1E-03 | None |
| ST-032 | Asphalt* | 1959 | 64,173 | 21.25 | 24 | 82 | 1.90E-09 | 2.0E-04 | 0.51 | 2.6E-04 | None |
| ST-033 | Asphalt* | 1959 | 30,104 | 12 | 35.5 | 150 | 1.90E-09 | 2.0E-04 | 0.08 | 4.0E-05 | None |
| ST-034 | Asphalt* | 1998 | 59,720 | 15.5 | 42 | 150 | 1.90E-09 | 2.0E-04 | 0.08 | 4.0E-05 | None |
| ST-035 | Asphalt* | 1959 | 210,990 | 33.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 1.81 | 9.1E-04 | None |
| ST-036 | Asphalt* | 1999 | 30,104 | 12 | 35.5 | 150 | 1.90E-09 | 2.0E-04 | 0.13 | 6.5E-05 | None |
| ST-037 | Asphalt* | 1998 | 127,092 | 26 | 32 | 150 | 1.90E-09 | 2.0E-04 | 0.55 | 2.8E-04 | None |
| ST-038 | Asphalt* | 1959 | 59,715 | 21 | 22 | 150 | 1.90E-09 | 2.0E-04 | 0.49 | 2.5E-04 | None |
| ST-039 | Cutback Asphalt* | 1985 | 30,104 | 12 | 35.5 | 38 | 1.30E-04 | 2.0E-04 | 0.04 | 2.0E-05 | None |
| ST-040 | Cutback Asphalt* | 1985 | 30,104 | 12 | 35.5 | 38 | 1.30E-04 | 2.0E-04 | 0.04 | 2.0E-05 | None |
| ST-041 | Asphalt* | 1973 | 1,054,951 | 66 | 42 | 150 | 1.90E-09 | 2.0E-04 | 0.92 | 4.6E-04 | None |
| ST-042 | Asphalt* | 1975 | 20,728 | 10.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 0.36 | 1.8E-04 | None |
| ST-043 | Asphalt* | 1980 | 23,689 | 12.5 | 28 | 150 | 1.90E-09 | 2.0E-04 | 0.52 | 2.6E-04 | None |
| ST-044 | Residual Fuel Oil No.6 | 1980 | 30,104 | 12 | 35.5 | 25 | 2.50E-05 | 2.0E-04 | 0.01 | 5.0E-06 | None |
| ST-045 | Asphalt* | 1980 | 30,104 | 12 | 34 | 150 | 1.90E-09 | 2.0E-04 | 2.78 | 1.4E-03 | None |
| ST-049 | Anti-Strip Additive** | 1987 | 7,774 | 10.5 | 12 | 25 | 2.00E-02 | 2.5E-02 | 4.60 | 2.3E-03 | None |
| ST-050 | Multigrade Asphalt* | 1988 | 25,000 | 12.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 0.87 | 4.4E-04 | None |
| ST-051 | Multigrade Asphalt* | 1987 | 25,000 | 12.5 | 32 | 150 | 1.90E-09 | 2.0E-04 | 0.87 | 4.4E-04 | None |
| ST-052 | Multigrade Asphalt* | 1987 | 5,264 | 8 | 14 | 150 | 1.90E-09 | 2.0E-04 | 0.04 | 2.0E-05 | None |
| ST-053 | Polyphosphoric Acid | 2002 | 4,500 | 8 | 12 | 25 | Negligible | Negligible | 0.00 | 0.0E+00 | None |
| ST-054 | Asphalt* | 2002 | 30,104 | 12 | 35.5 | 150 | 1.90E-09 | 2.0E-04 | 0.13 | 6.5E-05 | None |
| ST-055 | Asphalt* | 2002 | 30,104 | 12 | 35.5 | 150 | 1.90E-09 | 2.0E-04 | 0.13 | 6.5E-05 | None |
| ST-056 | Asphalt* | 2002 | 2,165,520 | 96 | 40 | 150 | 1.90E-09 | 2.0E-04 | 9.31 | 4.7E-03 | None |
| ST-057 | Asphalt* | 2002 | 4,265,856 | 123 | 48 | 150 | 1.90E-09 | 2.0E-04 | 18.34 | 9.2E-03 | None |
| ST-066 | Asphalt* | 1970 | 210,000 | 30 | 36 | 150 | 1.90E-09 | 2.0E-04 | 0.90 | 4.5E-04 | None |
| ST-067 | Asphalt* | 1970 | 210,000 | 30 | 36 | 150 | 1.90E-09 | 2.0E-04 | 0.90 | 4.5E-04 | None |
| ST-175 | Asphalt* | 1993 | 7,401,059 | 162 | 48 | 150 | 1.90E-09 | 2.0E-04 | 6.36 | 3.2E-03 | None |
| ST-803 | Asphalt* | 1970 | 3,352,388 | 120 | 40 | 150 | 1.90E-09 | 2.0E-04 | 2.84 | 1.4E-03 | None |
| ST-560 | Asphalt* | 1970 | 2,350,080 | 100 | 40 | 150 | 1.90E-09 | 2.0E-04 | 1.98 | 9.9E-04 | None |
| ST-260 | Asphalt* | 1970 | 1,054,951 | 66 | 42 | 150 | 1.90E-09 | 2.0E-04 | 0.92 | 4.6E-04 | None |
| ST-026 | Asphalt* | 1972 | 33,000 | 15 | 25 | 150 | 1.90E-09 | 2.0E-04 | 1.32 | 6.6E-04 | None |
| ST-027 | Asphalt* | 1972 | 33,000 | 15 | 25 | 150 | 1.90E-09 1.90E-09 | 2.0E-04 | 1.32 | 6.6E-04 | None |
| ST-048 | Asphalt* | 1987 | 1,170 | 5.33 | 6 | 150 | 1.50E-09 | 2.0E-04 | 0.17 | 8.5E-05 | None |
| Totals | l . | | | | l . | | | | 123.63 | 0.0618 | |

Notes:

* - Residual Oil No.6 was used in TANKS 4.0 as a conservative estimate for asphalt, cutback asphalt, and tall oil.

** - 1,3-Dibromopropane was used in TANKS 4.0 as a conservative estimate for anti-strip additive.

VOC emission estimates determined using EPA's TANKS 4.0.

Appendix A: Emission Calculations Fugitive PM Emissions from Unpaved Roads

Company Name: Asphalt Materials, Inc.

Address City IN Zip: 4902 West 86th Street, Indianapolis, IN 46268

CP: F097-6035
PIt ID: 097-00098
Reviewer: ERG/AAB
Date: 16-Oct-02

Equation: Ef = $\frac{k^*(s/12)^{a*}(w/3)^{b}}{(M_{drv}/0.2)^{c}}$ [(365 -p)/365] (S/15)

where:

Ef = emission factor (lb/VMT)

k = empirical constants

s = surface material silt content (%)

W = mean vehicle weight (tons)

M = suface material moisture content (%)

a = empirical constant

b = empirical constant

c = empirical constant

S = average vehicle speed (miles/hour)

p = Number of days with at least 0.01 in of precipitation per year

Truck Traffic

| | PM-10 | PM |
|----------------------------|--------|--------|
| k = | 2.6 | 10 |
| s = | 4.8 | 4.8 |
| W = | 40 | 40 |
| a = | 0.8 | 0.8 |
| b = | 0.4 | 0.5 |
| C = | 0.3 | 0.4 |
| M = | 0.2 | 0.2 |
| p = | 80 | 80 |
| S = | 10 | 10 |
| Ef = | 2.75 | 13.70 |
| Miles traveled per year = | 73584 | 73584 |
| Emissions (tons/year) = | 101.14 | 503.99 |
| Emissions Corrected for | 07.40 | 005.00 |
| lower speeds (tons/year) = | 67.42 | 335.99 |

The equation and constants were taken from AP-42, Chapter 13.2.2 Unpaved Roads.

The emissions were corrected by multiplying by (S/15) in order to correct for the speeds being lower than 15 miles/hour.